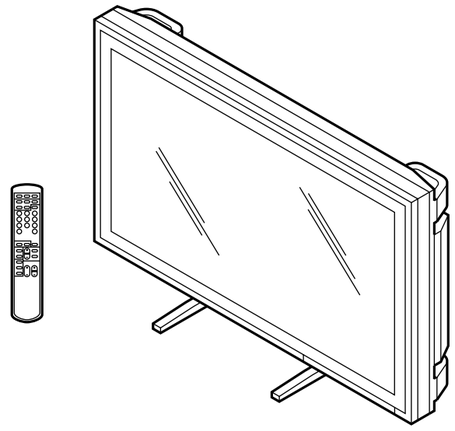
SERVICE MANUAL

MODEL	DEST.	CHASSIS NO.	MODEL	DEST.	CHASSIS NO.
PFM-500A3WE	AEP		BKM-500		
PFM-500A3WG	E		MB-514		
PFM-500A3WU	US/CND		RM-921		
PFM-510A2WE	AEP				
PFM-510A2WG	E				
PFM-510A2WU	US/CND				



PFM-500A3W/510A2W	Flat Panel Monitor
BKM-500	Input Adaptor
MB-514	Mounting Bracket
RM-921	Remote Commander

9-929-680-01

Sony Corporation
Communication System Solutions Network Company

English
00DY16110-1
Printed in Japan
©2000.4

FLAT PANEL MONITOR

SONY

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres.
Pour toute réparation faire appel à une personne compétente uniquement.

WARNING!!

AN INSULATED TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY A ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION!!

AFIN D’ÉVITER TOUT RISQUE D’ÉLECTROCUTION PROVENANT D’UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D’ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L’ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÉCURITÉ!!

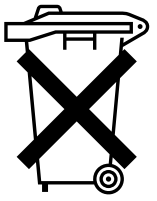
LES COMPOSANTS IDENTIFIÉS PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D’UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

Voor de klanten in Nederland

Dit apparaat bevat een CR2025 batterij voor memory back-up.

Raadpleeg uw leverancier over de verwijdering van de batterij op het moment dat u het apparaat bij einde levensduur afdankt.

Gooi de batterij niet weg. maar lever hem in als KCA.



Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Vorsicht!

Explosionsgefahr bei unsachgemäßem Austausch der Batterie.

Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ.
Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

ATTENTION

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.

Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.
Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

ADVARSEL!

Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

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Section 1
Operating Instructions

This section is reprinted from operation manual.

1-1. PFM-500A3WE/500A3WG/500A3WU/510A2WE/510A2WG/510A2WU Operating Instructions

4-076-854-01 (1)

SONY

Flat Panel Monitor

GB

Operating Instructions

PFM-510A2WU/510A2WE/510A2WJ/510A2WG
PFM-500A3WU/500A3WE/500A3WJ/500A3WG

© 2000 Sony Corporation

SONY PFM-510A2WU/510A2WE/510A2WJ/510A2WG/500A3WU/500A3WE/500A3WJ/500A3WG

WARNING

Owner’s Record

The model and serial numbers are located on the rear. Record the model and serial numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No._____ Serial No._____

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada

This class A digital apparatus complies with Canadian ICES-003.

For the customers in Europe

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

For PFM-510A2WE/510A2WG/500A3WE/500A3WG users

THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow : Earth
Blue : Neutral
Brown : Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

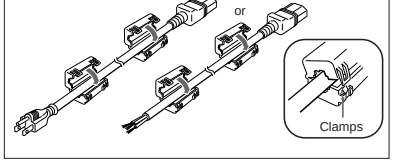
The socket-outlet should be installed near the equipment and be easily accessible.

Note

When you connect a computer to this monitor, attach the supplied ferrite cores. If you do not do this, this monitor will not conform to mandatory FCC/IC/CE (EN55022) standards.

Attaching the ferrite cores

Set the ferrite cores on the both ends of the AC power cord. Close the lid tightly until the clamps click.



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Precautions

On safety

- Operate the unit on 100 to 120 V AC or 220 to 240 V AC.
- A nameplate indicating operating voltage, power consumption, etc. is located on the rear.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for several days or more.
- To disconnect the AC power cord, pull it out by grasping the plug. Never pull the cord itself.
- When the unit is installed on the floor, be sure to use the retractable feet.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- When you install multiple equipment with the unit, the following, such as malfunction of the Remote Commander, noisy picture, noisy sound, may occur depending on the position of the unit and other equipment.

On the PDP (Plasma Display Panel)

- There may be some tiny black points and/or bright points on the PDP. These points are normal.
- Do not display the same still image on the screen for a long time. Otherwise, an afterimage or ghost may appear on a part of the panel. Use the screen saver function to equalize use of the screen display.

On cleaning

To keep the unit looking brand-new, periodically clean it with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers since these will damage the cabinet. As a safety precaution, unplug the unit before cleaning it.

On repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

If you have any questions about this unit, contact your authorized Sony dealer.

For PFM-510A2WE/500A3WE Users

The PFM-510A2WE/500A3WE Flat Panel Monitor will not function by itself.
Install the BKM-500 or BKM-501D Input Adaptor in the monitor.
If you are using the BKM-500, refer to this Operating Instructions.
If you are using the BKM-501D, refer to the Operating Instructions supplied with the BKM-501D.

For more details, contact your authorized Sony dealer.

Features

The PFM-510A2W/500A3W series are 16:9 42-inch flat panel monitors adopting a PDP (Plasma Display Panel), which can accept various types of signals with the built-in scan converter.

Improved image quality

The PFM-510A2W series achieves higher image quality with its PDP (Plasma Display Panel) set to 1024 dots × 1024 lines. This makes for a finely-detailed HDTV and PC image.
The PFM-500A3W series achieves brighter image quality with 852 dots (horizontal) × 480 lines (vertical) adopting PDP technology.

Internal high-performance scan converter

The monitor has a high performance scan converter. Using a unique algorithm, the monitor processes signals in a wide range of formats – Video, HDTV, PC, etc.

Flexibility

An option slot is in place for future expansion.
The slot-in option adapter allows for quick and easy system upgrades.

Other features

- Three sets of video inputs with audio inputs: one composite video or Y/C input, one RGB input, and one RGB/component input.
- Displays the HDTV signal with a tri-level sync signal.
- Three dimensional comb filter for NTSC Y/C separation.
- Line correlation comb filter for PAL Y/C separation.
- Automatic input signal detection with on-screen indication.
- Windows[1]95/98 PnP (Plug and Play) compatible.
- Picture AGC function — this function automatically adjusts and improves the contrast when a low intensity signal is input.
- On-screen menu for various adjustments and settings
- On-screen display in six languages for user-friendly access. (Languages: English, German, French, Italian, Spanish and Japanese)
- Fine adjustment of image size and position
- Memory function for storage of up to twenty picture settings.
- ID control
- Self-diagnosis function.
- Remote (RS-232C) connector (mini DIN 8-pin)
- Control-S connector
- Accepts infrared or wired Sony Remote Commanders using SIRCS code.
- Vertical setup
- Closed caption decoder
- Screen saver to reduce an afterimage or ghosting.

Warning on power connection

Use a proper power cord for your local power supply.

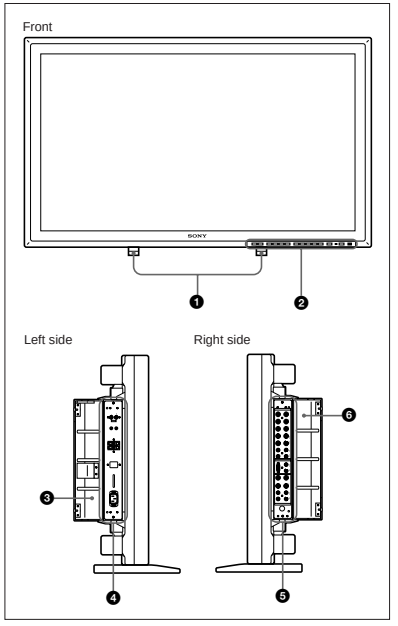
	United States, Canada	Continental Europe		United Kingdom, Ireland, Australia, New Zealand	Japan
Plug type	VM0033B	COX-07	636	—[a)]	VM1296
Female end	VM0113	COX-02	VM0310B	VM0303B	VM1313
Cord type	SJT	H05VV-F		CEE (13) 53rd (O.C)	HVCTF
Minimum cord set rating	13A/125V	10A/250V		10A/250V	10A/125V
Safety approval	UL/CSA	VDE		VDE	DENTORI

a) Note: Use an appropriate rating plug which is applied to local regulations.

1) Windows is a registered trademark of the Microsoft Corporation.

Location and Function of Parts and Controls

Front / Sides



❶ Retractable feet
Use for setting the monitor on the floor.
For details on using the retractable feet, see "Using the Retractable Feet" on page 13 (GB).

❷ Control panel
For details on the control panel, see "Control Panel" on page 8 (GB).

❸ Left panel cover
Open this when using the left connector panel.
You can install the Remote Commander in a slot on the back of this cover.
For details on opening the panel cover, see the right-hand side of this page.

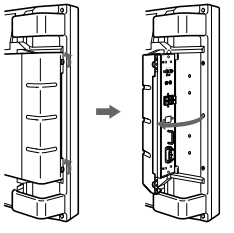
❹ Left connector panel
For details on the left connector panel, see "Left Connector Panel" on page 10 (GB).

❺ Right connector panel
For details on the right connector panel, see "Right Connector Panel" on page 9 (GB).

❻ Right panel cover
Open this when using the right connector panel.
For details on opening the panel cover, see below.

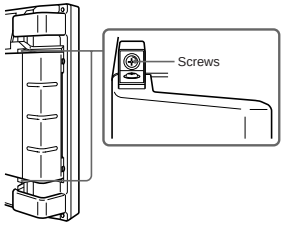
To open the panel cover

Loosen the screws counterclockwise and open the cover.



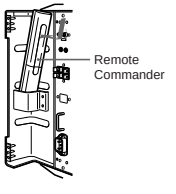
To take off the panel cover

Loosen the screws as illustrated below and take off the panel cover.



To install the Remote Commander in the panel cover

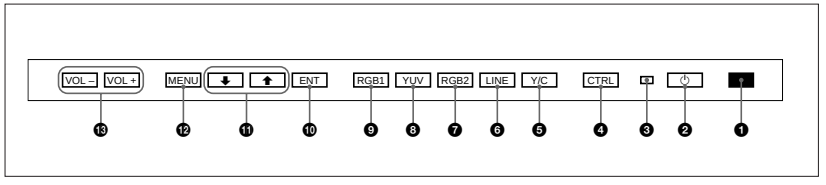
Install the Remote Commander in the slot on the back of the left panel cover as illustrated below.



Note

When housing the Remote Commander, make sure that the top of the Remote Commander faces upward and the rear faces outside.

Control Panel



❶ Remote control detector
Receives the beam from the Remote Commander.

❷ ⏻ (standby) switch/⏻ (standby) indicator
Press to turn on the monitor. Press again to go back to the standby mode.
The ⏻ (standby) indicator lights up in red in the standby mode.
When the ⏻ indicator flashes, see "Self-diagnosis Function" on page 36 (GB).

❸ Power indicator
Lights up when the monitor is turned on.

❹ CTRL (control) button
To operate the buttons on the control panel, first press this button. When the buttons light up or flash that shows that they can be operated. Press again to deactivate them.

Note

The buttons (except for ⏻ (standby) switch ❷) on the control panel do not function if you do not press the CTRL button first.

❺ Y/C button
Selects the signal input from the Y/C IN jack among the LINE connectors.

❻ LINE button
Selects the signal input from the VIDEO IN connector among the LINE connectors.

❼ RGB2 button
Selects the signal input from the RGB2 connectors.

❽ YUV button
Selects the component signal input from the RGB1 connectors.

❾ RGB1 button
Selects the RGB signal input from the RGB1 connectors.

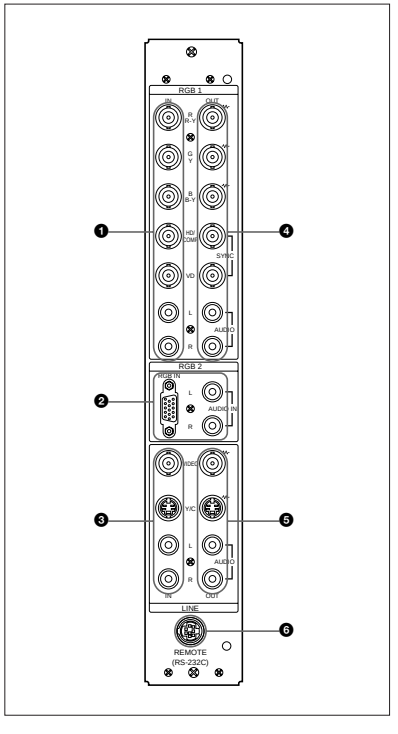
❿ ENT (enter) button
Press to select the desired item from the menu displayed.

⓫ ↑/↓ buttons
Press to move the cursor (▶) to an item or to adjust a value in a menu.

⓬ MENU button
Press to make the menu appear.

⓭ VOL (volume) +/– buttons
Press the + button to increase the volume, or the – button to decrease the volume.

Right Connector Panel



Note

The image enhancing process for video signals (NTSC, PAL, SECAM, NTSC4.43, PAL60) works only for composite (Y/C) or component (Y/R-Y/B-Y) input. The image from the RGB input may look blurred. This is normal.

❶ RGB1 IN connectors

R (R-Y)/G (Y)/B (B-Y) IN (BNC-type): Inputs an analog RGB signal or a component signal. Connects to the RGB signal or component (Y/B-Y/R-Y) signal output of a computer or video equipment.
This monitor also accepts an HD analog component (Y/PB/PR) signal. Inputs the PB signal to the B (B-Y) IN connector and PR signal to the R (R-Y) IN connector.

HD/COMP IN (BNC-type): Inputs an H sync signal or a composite sync signal. Connects to the H sync signal or composite sync signal output of a computer or video equipment.

VD IN (BNC-type): Inputs the V sync signal. Connects to the V sync signal output of a computer or a piece of video equipment.

An external sync signal is selected automatically. See the priority chart below.

Input connector	Input sync signals		
HD/COMP IN	H Sync	Comp Sync	—
VD IN	V Sync	—	—
G(Y) IN	Sync on G	Sync on G	Sync on G
Sync signals to be selected	H Sync V Sync	Comp Sync	Sync on G

AUDIO IN (L/R) (phono type): Inputs an audio signal. Connects to the audio output of a computer or a piece of video equipment. Connects to the channel L when the audio signal is monaural.

❷ RGB2 IN connectors

RGB IN (D-sub 15-pin): Connects to the RGB signal output of a computer.

AUDIO IN (L/R) (phono type): Inputs an audio signal. Connects to the audio output of a computer. Connects to channel L when the audio signal is monaural.

❸ LINE IN connectors

VIDEO IN (BNC-type): Connects to the composite video signal output of the video equipment.

Y/C IN (Mini DIN 4-pin): Connects to the Y/C signal output of the video equipment.

AUDIO IN (L/R) (phono type): Connects to the audio output of the video equipment. Connects to channel L when the audio signal is monaural.

❹ RGB1 OUT connectors
These connectors are used as loop-through outputs of the RGB1 IN connectors ❶.
When the plug is connected to the RGB OUT connectors, the 75-ohms termination of the RGB IN connectors is released, and the signal input to the RGB IN connectors is output from the these connectors.

R (R-Y)/G (Y)/B (B-Y) OUT (BNC-type): Loop-through outputs of the RGB IN connectors. Connects to the RGB signal or component (Y/B-Y/R-Y) signal input of another monitor.

HD/COMP OUT (BNC-type): Loop-through output of the HD/COMP IN connector. Connects to the H sync signal or composite sync signal input of another monitor.

VD OUT (BNC-type): Loop-through output of the VD IN connector. Connects to the V sync signal input of another monitor.

Note

The HD/COMP OUT and VD OUT connectors are high impedance outputs.
When using these outputs, connect a monitor with a high impedance sync input connector, or the picture might oscillate or disappear because of the sync signal level mismatch.

AUDIO OUT (L/R) (phono type): Loop-through outputs of the AUDIO IN jacks. Connects to the audio inputs of another monitor.

❺ LINE OUT connectors
These connectors are used as loop-through outputs of the LINE IN connectors ❸.
When the plug is connected to the VIDEO OUT connector or Y/C OUT jack, the 75-ohms termination of the VIDEO IN connector or Y/C IN jack is released, and the signal input to the VIDEO IN or Y/C IN jack is output from the VIDEO OUT connector or Y/C OUT jack.

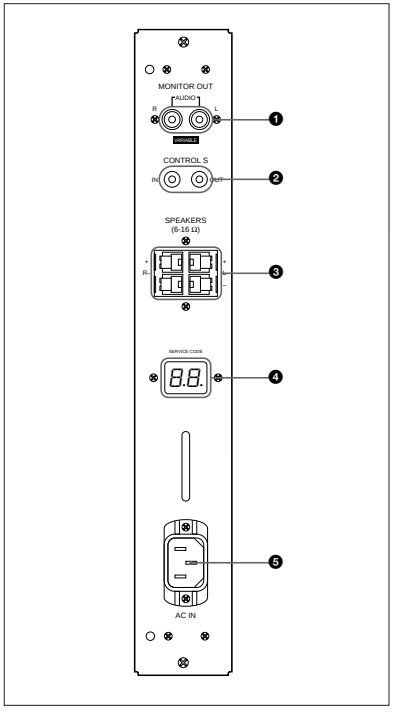
VIDEO OUT (BNC-type): Connects to the composite video signal input of another monitor or video equipment.

Y/C OUT (Mini DIN 4-pin): Connects to the Y/C signal input of another monitor or a piece of video equipment.

AUDIO OUT (L/R) (phono type): Loop-through outputs of the AUDIO IN jacks. Connects to the audio inputs of another monitor or a piece of video equipment.

❻ REMOTE (RS-232C) connector (mini DIN 8-pin)
This connector allows remote control of the monitor using the RS-232C protocol. For details, contact your authorized Sony dealer.

Left Connector Panel



❶ MONITOR OUT AUDIO (L/R) jacks (phono type)
Outputs the signal input from the AUDIO IN jacks. Connects to the audio inputs of an audio amplifier (not supplied).

Note

These jacks are variable outputs. Set the volume to the maximum position to set the output level to 500 mVrms.

❷ CONTROL S IN/OUT jacks (mini jacks)
Connects to the CONTROL S jacks of video equipment or another monitor. Then you can simultaneously control all equipment with a single Remote Commander.
To control equipment by aiming the supplied Remote Commander at the remote control detector of the monitor, connect the CONTROL S OUT jack of the monitor and the CONTROL S IN jack of the other equipment.

Notes

- If you connect the CONTROL S IN jack to the other equipment's CONTROL S OUT jack, you cannot operate the monitor with the Remote Commander.
- You can use a stereo cable with a mini plug instead of the control S cable.

❸ SPEAKERS L/R terminals
Connects to speakers with 6 to 16 ohms impedance.

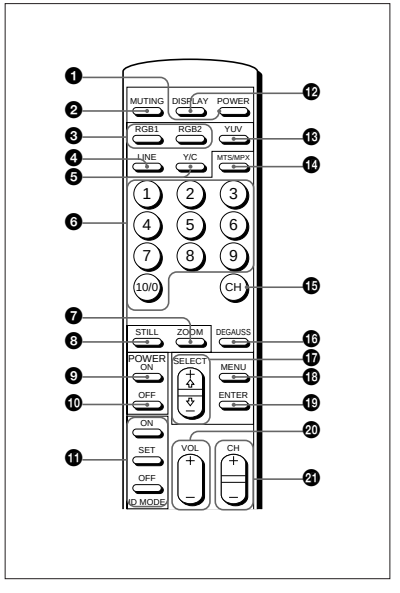
Note

Do not connect the speaker's cord to the monitor and to an amplifier simultaneously, or an excessive electric current might flow from the amplifier and damage the monitor.

❹ SERVICE CODE indicator
The indicator is only for qualified personnel.

❺ ∿AC IN socket
Connect the supplied AC power cord to this socket and to a wall outlet. Once you connect the AC power cord, the ⏻ (standby) indicator lights up in red and the monitor turns to standby mode.

Remote Commander RM-921



❶ POWER switch
Press to turn on the monitor. Press again to go back to the standby mode.

Note

When using multiple monitors, press this switch to turn monitors which are already on to the standby mode, or turn on monitors which are in the standby mode.

❷ MUTING button
Press to mute the sound. Press this button again or press the VOL (volume) +/– button to obtain the sound again.

❸ RGB1/RGB2 buttons
Select the signal input from the RGB1 or RGB2 connectors.

❹ LINE button
Selects the signal input from the VIDEO IN connector in the LINE connectors.

❺ Y/C button
Selects the signal input from the Y/C IN jack in the LINE connectors.

❻ Number buttons
Press to select the index number.

❼ ZOOM button
Each time you press this button, the image size changes (in order) to double (×2), triple (×3), quadruple (×4) and original size.

❽ STILL button
This button does not operate with the monitor.

❾ POWER ON switch
Press to turn on the monitor. When you use multiple monitors, you can use this switch instead of the POWER switch ❶ so as not to affect another monitor which may be already turned on.

❿ POWER OFF switch
Press to turn the monitor to the standby mode. When you use multiple monitors, you can use this switch instead of the POWER switch ❶ so as not to affect another monitor which may be in the standby mode.

⓫ ID MODE (ON/SET/OFF) buttons
Press the ON button to make an index number appear on the screen. Then press the index number of the monitor you want to operate and press the SET button. After you finish the operation, press the OFF button to return to the normal mode.

⓬ DISPLAY button
Displays the input signal information and the time at the top of the monitor screen. Press again to clear it.

⓭ YUV button
Selects the component signal input from the RGB1 connectors.

⓮ MTS/MPX button
This button does not operate with the monitor.

⓯ CH button
This button does not operate with the monitor.

⓰ DEGAUSS button
This button does not operate with the monitor.

⓱ SELECT +↑/–↓ buttons
Press to move the cursor (▶) to an item or to adjust a value in a menu.

⓲ MENU button
Press to make the menu appear.

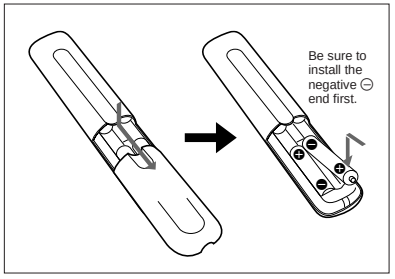
⓳ ENTER button
Press to select the desired item in a menu.

⓴ VOL +/– buttons
Press the + button to increase the volume, or the – button to decrease the volume.

㉑ CH +/– buttons
This button does not operate with the monitor.

Installing batteries

Insert two size AA (R6) batteries in correct polarity.



- In normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be exhausted sooner. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the Remote Commander for a fairly long time.

When the Remote Commander does not work
Check that the ⏻ indicator lights up. The Remote Commander operates the monitor only when the monitor is turned on, or it is in the standby mode.

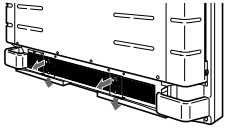
Note
When you use multiple monitors, if you connect the cable to the CONTROL S IN jack on the side of the monitor, you cannot operate the monitor with the Remote Commander.

Installation

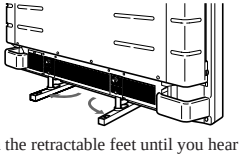
Using the Retractable Feet

This section describes the installation arrangements for installing the monitor.

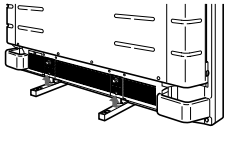
1 Pull out the knobs and pull down the retractable feet.



2 Turn the retractable feet outward.

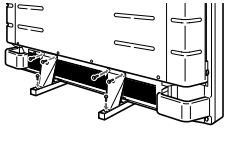


3 Push in the retractable feet until you hear the click.



To fix the retractable feet in place

When the monitor is installed on the floor, be sure to fix the retractable feet in place.
Install the foot support brackets as illustrated below.

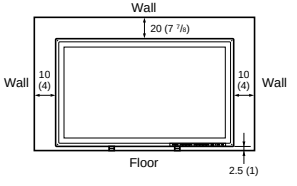


Caution

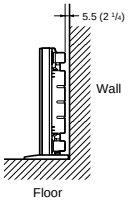
- When you install the monitor, make sure there is more space than that shown in the figure below.
- The ambient temperature must be 0 °C to +35 °C (32 °F to 95 °F).

When using the retractable feet

Front



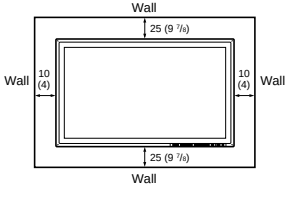
Side



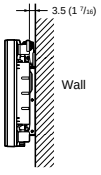
Units: cm (inches)

When using the mounting bracket

Front



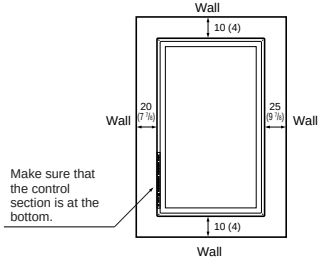
Side



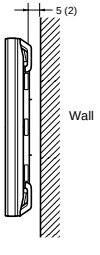
Units: cm (inches)

Hooked on the wall: Vertically

Front



Side

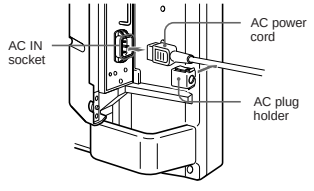


Units: cm (inches)

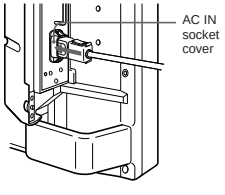
Connections

Connecting the AC Power Cord

1 Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) to the AC power cord.



2 Slide the AC plug holder over the cord until it connects to the AC IN socket cover.



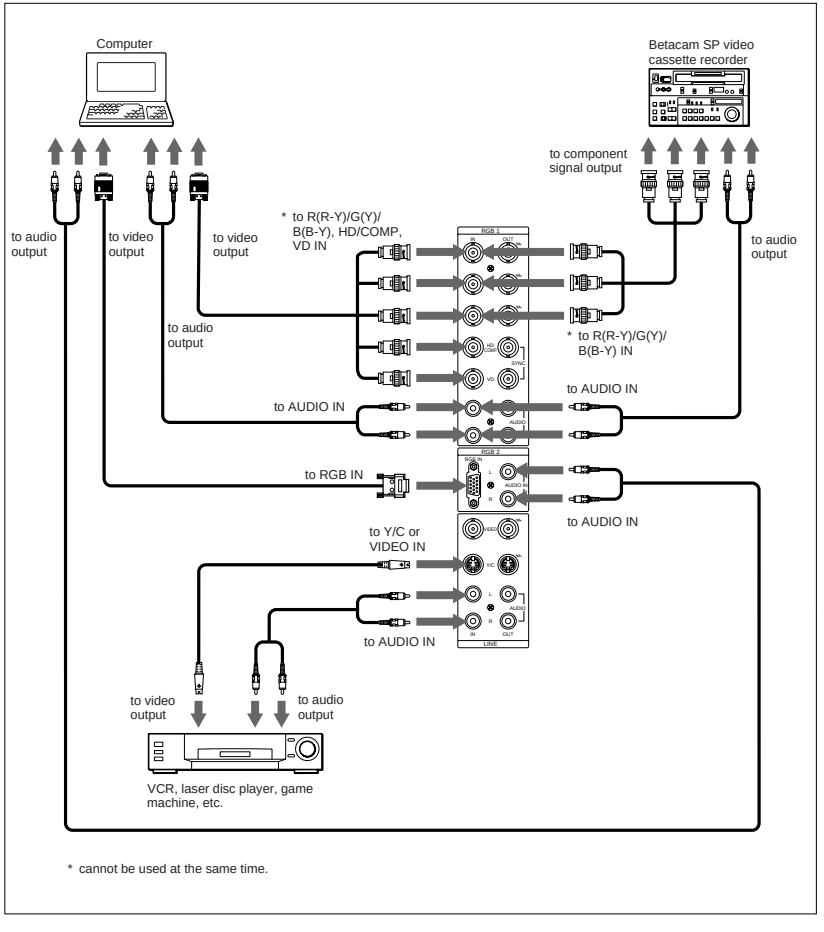
To remove the AC power cord

Squeeze the upper and lower sides and pull out the AC plug holder.

Connection Example

Before you start

- First make sure that the power to each piece of equipment is turned off.
- Use connecting cables suitable for the equipment to be connected.
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and other noise.
- To disconnect the cable, pull it out by grasping the plug. Never pull the cable itself.
- Read the instruction manual of the equipment to be connected.

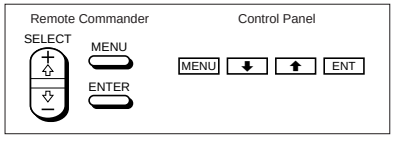


Using On-screen Menus

Operating Through Menus

Menu operating buttons

There are four buttons on the monitor and the Remote Commander for menu operations.

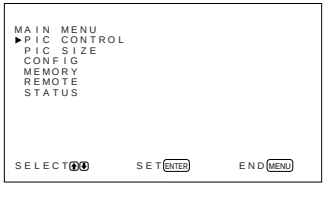


The buttons on the control panel are used for explanation purposes in this operating instructions. The ENTER button on the Remote Commander has the same function as the ENT button on the control panel and the SELECT +↑/–↓ buttons on the Remote Commander as same as the ↑/↓ buttons on the control panel.

Configuration of the menu

To select the language used in the menu, see page 31 (GB).

1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) and press ENT to select a menu.
The selected menu appears on the monitor screen.

3 Press ↑/↓ to move the cursor (▶) and press ENT to select an item.
The menu for the selected item appears on the monitor screen.

4 Press ↑/↓ to adjust or select the setting and press ENT to set.
The setting is registered and the menu returns to the previous menu.

To return to the normal screen, press the MENU button repeatedly until the menu disappears.

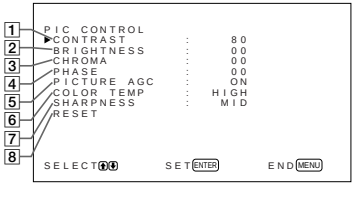
Menu Guide

Note

"– – – –" appears next to an item when its function is not available. The availability depends on the types of input signal.

PIC CONTROL menu

This menu is used for adjusting the picture.



1 CONTRAST
Press ↑ to increase the contrast and press ↓ to decrease it.

2 BRIGHTNESS
Press ↑ to make the picture brighter and press ↓ to make it darker.

3 CHROMA
Press ↑ to increase color saturation and press ↓ to decrease it.

4 PHASE
Press ↑ to make the overall picture greenish and press ↓ to make it purplish.

5 PICTURE AGC
Select ON to automatically increase the brightness when a low brightness signal is input.
This function works only for LINE input or 15 kHz YUV input.

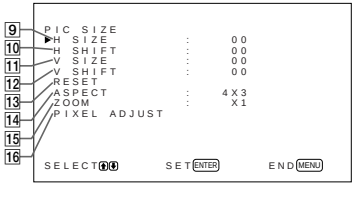
6 COLOR TEMP
Changes color temperature.
For details, see "COLOR TEMP" on page 23 (GB).

7 SHARPNESS
Changes the outline correction level in three levels (HIGH, MID or LOW).
For details, see "SHARPNESS" on page 24 (GB).

8 RESET
Restores the factory settings in the PIC CONTROL menu items 1 to 7.
For details on using the reset function, see "Restoring the PIC CONTROL Menu Items to Original Settings" on page 24 (GB).

PIC SIZE menu

This menu is used for resizing and positioning the picture.



9 H SIZE
Adjusts the horizontal picture size. Press ↑ to enlarge the horizontal size and press ↓ to diminish it.

10 H SHIFT
Adjusts the horizontal centering. Press ↑ to move the picture to the right and press ↓ to move it to the left.

11 V SIZE
Adjusts the vertical picture size. Press ↑ to enlarge the vertical size and press ↓ to diminish it.

12 V SHIFT
Adjusts the vertical centering. Press ↑ to move the picture up and press ↓ to move it down.

13 RESET
Restores the factory settings in the PIC SIZE menu items 9 to 12.
For details on using the reset function, see "Restoring the Original Picture Size and Position" on page 26 (GB).

14 ASPECT
Sets the aspect ratio of the picture to 4:3, 16:9 or wide-zoom size.
For details on the wide-zoom, see "Enlarging a 4:3 Image to a 16:9 Screen Naturally (Wide Zoom Mode)" on page 27 (GB).

15 ZOOM
Enlarges the image (in order) to double (×2), triple (×3) and quadruple (×4). You can also operate with the ZOOM button on the Remote Commander.

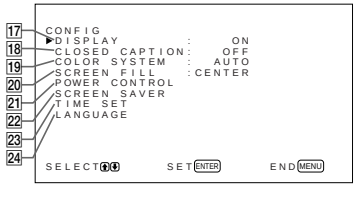
Note

When you use the wide zoom mode, set ZOOM to ×1. If ZOOM is set to ×2, ×3 or ×4, the wide zoom mode cannot be used.

16 PIXEL ADJUST
Adjusts the dot phase and total number of horizontal pixels when you see noise on the edges of the characters and the vertical lines.
For details, see "Adjusting the Pixels" on page 28 (GB).

CONFIG menu

This menu is used for adjusting the signal or selecting the language.



17 DISPLAY
Selects ON to display the input signal information for about five seconds at the top of the monitor screen when turning on the power or switching the input signal.

18 CLOSED CAPTION
Displays closed captions.
For details, see "Displaying Closed Captions" on page 20 (GB).

19 COLOR SYSTEM
Selects the input signal.
AUTO: to display NTSC, PAL or SECAM signals
443NT: to display NTSC4.43 signals
PAL60: to display PAL60 signals

20 SCREEN FILL
Selects the point of origin for resizing the picture.
CENTER: Sets the point of origin on the center of the monitor.
CORNER: Sets the point of origin at the upper-left corner of the monitor.

21 POWER CONTROL
Sets the length of time until the system goes into the power saving mode.
For details, see "Controlling Power On/Off Automatically (Power Control Function)" on page 34 (GB).

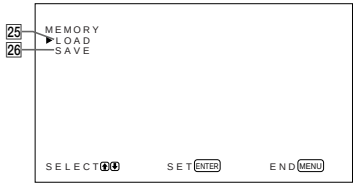
22 SCREEN SAVER
Enables the screen saver to reduce afterimage or ghosting.
For details, see "Reducing Afterimage/Ghosting (Screen Saver Function)" on page 31 (GB).

23 TIME SET
Sets the time.
For details, see "Adjusting the time" on page 21 (GB).

24 LANGUAGE
Selects the on-screen language (English, German, French, Italian, Spanish or Japanese).
For details, see "Selecting the On-screen Language" on page 31 (GB).

MEMORY menu

This menu is used for saving or recalling the settings in the PIC CONTROL and PIC SIZE menus.



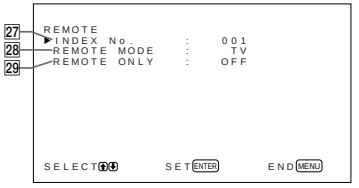
For details, see "Using the Memory Function" on page 29 (GB).

25 LOAD
Recalls the preset settings.

26 SAVE
Saves the settings.

REMOTE menu

This menu is used for remote control settings.



27 INDEX No.
Sets the index number of the monitor.

Note
When you set the number, use the buttons on the monitor.
For details about the index number, see "Operating a Specific Monitor With the Remote Commander" on page 36 (GB).

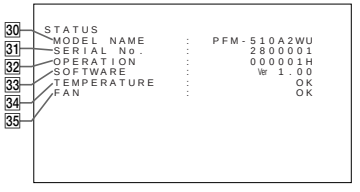
28 REMOTE MODE
Selects the Remote Commander mode.
TV: The Sony monitors' or the TVs' commander
PJ: The Sony projectors' commander
OFF: Disables the remote control.

Note
When you change the Remote Commander mode, use the buttons on the monitor. You cannot change the Remote Commander mode with the Remote Commander.
For details, see "Using Other Remote Commander Models" on page 38 (GB).

29 REMOTE ONLY
Select ON to disable the front control buttons on the monitor. The monitor can only be controlled with the Remote Commander. While REMOTE ONLY is ON, the indicators on the front panel go off.
To cancel the REMOTE ONLY mode, set REMOTE ONLY to OFF with the Remote Commander, or press the CTRL button while pressing the ⏻ switch on the monitor. The monitor turns to the standby mode and the REMOTE ONLY mode is cancelled.
The setting in this item is still retained when the AC power cord is disconnected or when you turn on/off the monitor with the Remote Commander.

STATUS menu

This menu is used for displaying the internal condition of the monitor.



30 MODEL NAME
Indicates the model name.

31 SERIAL No.
Indicates the serial number.

32 OPERATION
Indicates the total operation hours.

Note
The standby mode is not counted as part of the OPERATION time.

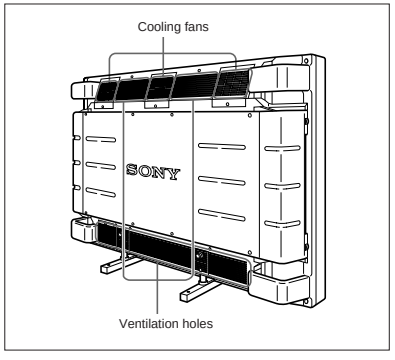
33 SOFTWARE
Indicates the system software version.

34 TEMPERATURE
Indicates whether the internal temperature of the monitor is normal.
OK: Normal
NG: Unusual
When the internal temperature is unusual, NG is displayed and the item flashes in red. The ⏻ indicator on the control panel also flashes.

Note
The "TEMPERATURE NG" message may appear when the ventilation holes are blocked or the monitor is installed in a poorly ventilated area. In this case, check that the ventilation holes are not blocked and install the monitor in a well ventilated area. If the message is still displayed, contact your authorized Sony dealer.
When the ⏻ indicator flashes or NG is indicated, see "Self-diagnosis Function" on page 36 (GB).

35 FAN
The cooling fans are built into this monitor. This item indicates whether the cooling fans work properly.
OK: Normal
NG: Unusual
When the cooling fans are not working normally, NG is displayed and the item flashes in red. The ⏻ indicator on the control panel also flashes.

Note
When the "FAN NG" message appears, contact your authorized Sony dealer.
When the ⏻ indicator flashes or NG is indicated, see "Self-diagnosis Function" on page 36 (GB).



Note
The upper cooling fans detect the monitor's internal temperature and control the fan rotation. If the ambient temperature is high, the fan speed increases and the noise will be louder.

Watching the Picture

Before you start

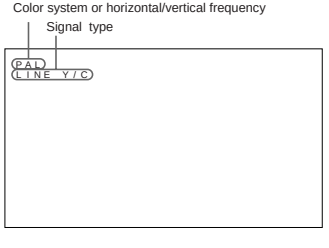
- Turn on the monitor.
- Turn on the connected equipment and play a video source.
- To display the input signal information on the screen when turning on the power or switching the input signal, set "DISPLAY" in the CONFIG menu to ON.
- To select the on-screen language used in the menu, see page 31 (GB).

Switching the Input Signal

1 Press CTRL on the control panel of the monitor.
The RGB1, YUV, RGB2, LINE, and Y/C buttons light up.

2 Select the input source to be displayed by pressing the following buttons.

RGB1: Selects the audio and video signal input from the RGB1 connectors when the input signal is an RGB signal.
YUV: Selects the audio and video signal input from the RGB1 connectors when the input signal is a component signal.
RGB2: Selects the audio and video signal input from the RGB2 connectors.
LINE: Selects the audio and video signal input from the VIDEO IN connector and AUDIO IN jack among the LINE connectors.
Y/C: Selects the audio and video signal input from the Y/C IN connector and AUDIO IN jack among the LINE connectors.



The selected input signal appears on the monitor screen.

You can also switch the input signal with the Remote Commander.

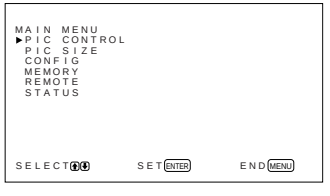
Note

We recommend input source video equipment equipped with a TBC (time base corrector). If the monitor receive a signal without TBC, the picture may disappear due to disturbance of the sync signal.

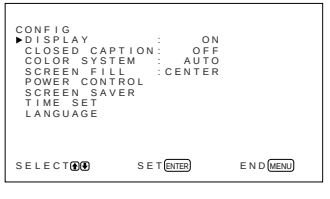
Switching the Display Mode

Displaying Closed Captions

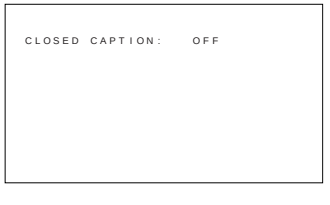
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to "CONFIG" and press ENT.
The CONFIG menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to "CLOSED CAPTION" and press ENT.
The following menu appears on the monitor screen.

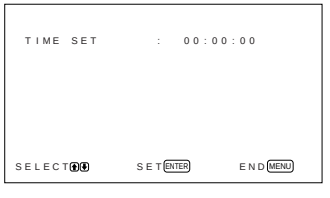


4 Select the caption type.
OFF: The caption is not displayed.
CAPT1: Displays caption1 over the picture.
CAPT2: Displays caption2 over the picture.
TEXT1: Displays caption1 against a black background.
TEXT2: Displays caption2 against a black background.

5 Press MENU.
The menu returns to the CONFIG menu.

Adjusting the time

1 In the CONFIG menu, press ↑/↓ to move the cursor (▶) to "TIME SET" and press ENT.
The following menu appears on the monitor screen.



2 Press ENT.
The background of the hour is displayed in cyan.

3 Adjust the hour with ↑/↓ and press ENT.
The hour is defined and the background of the minute is displayed in cyan.

4 Similarly, adjust the minute and press ENT.
The minute is defined and the second is reset to 00.

To display the time, press the DISPLAY button on the Remote Commander. The time is displayed in the upper-right corner of the monitor.

Input Signal and Monitor Status Information Display

Input signal and monitor status information is displayed on the monitor screen for about five seconds when turning on the power or switching the input signal.
To disable this function, follow the steps below.

1 In the CONFIG menu, press ↑/↓ to move the cursor (▶) to "DISPLAY" and press ENT.
The following menu appears on the monitor screen.

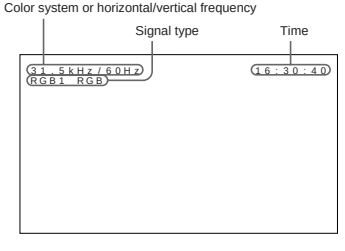
2 Press ↑/↓ to set DISPLAY to OFF and press ENT.
The DISPLAY function is disabled.

To activate the information function, set DISPLAY to ON in step **2** above. The factory default is ON.

Note

You can display the input signal information and the time anytime by pressing the DISPLAY button on the Remote Commander, regardless of the above setting.

The input signal information list



Preset input signals			
	Signal name	Color system or horizontal/ vertical frequency	
	Computer signals		
1	VGA[a]-1 (VGA 350)	31.5kHz	70Hz
2	640×350@85Hz (VESA[b] STD)	37.9kHz	85Hz
3	640×400@85Hz (VESA STD)	37.9kHz	85Hz
4	640×480@60Hz (VESA STD)	31.5kHz	60Hz
5	Mac[c] 13"	35.0kHz	67Hz
6	640×480@72Hz (VESA STD)	37.9kHz	73Hz
7	640×480@75Hz (VESA STD)	37.5kHz	75Hz
8	640×480@85Hz (VESA STD)	43.3kHz	85Hz
9	VGA (VGA TEXT)	31.5kHz	70Hz
10	720×400@85Hz (VESA STD)	37.9kHz	85Hz
11	800×600@56Hz (VESA STD)	35.2kHz	56Hz
12	800×600@60Hz (VESA STD)	37.9kHz	60Hz
13	800×600@72Hz (VESA STD)	48.1kHz	72Hz
14	800×600@75Hz (VESA STD)	46.9kHz	75Hz
15	800×600@85Hz (VESA STD)	53.7kHz	85Hz
16	Mac 16"	49.7kHz	75Hz
17	1024×768@60Hz (VESA STD)	48.4kHz	60Hz
18	1024×768@70Hz (VESA STD)	56.5kHz	70Hz
19	1024×768@75Hz (VESA STD)	60.0kHz	75Hz
20	1024×768@85Hz (VESA STD)	68.7kHz	85Hz
21	1152×864@75Hz (VESA STD)	67.5kHz	75Hz
22	Mac 21"	68.7kHz	75Hz
23	1280×960@60Hz (VESA STD)	60.0kHz	60Hz
24	1280×960@85Hz (VESA STD)	85.9kHz	85Hz
25	1280×1024@60Hz (VESA STD)	64.0kHz	60Hz
26	1280×1024@75Hz (VESA STD)	80.0kHz	75Hz
27	1280×1024@85Hz (VESA STD)	91.1kHz	85Hz
28	1600×1200@60Hz (VESA STD)	75.0kHz	60Hz
	SDTV/HDTV		
1	PAL	PAL	
2	NTSC	NTSC	
3	SECAM	SECAM	
4	NTSC4.43	NTSC/4.43	
5	PAL60	PAL/60	
6	1080/24psf	27.0kHz	48Hz
7	1080/50i	28.1kHz	50Hz
8	575/50p	31.3kHz	50Hz
9	480/60p	31.5kHz	60Hz
10	1080/60i	33.8kHz	60Hz
11	720/60p	45.0kHz	60Hz

a) VGA is a registered trademark of International Business Machines Corporation, USA.
b) VESA is a registered trademark of the Video Electronics Standards Association.
c) Mac (Macintosh) is a registered trademark of Apple Computer, Inc.

Notes

- When inputting an HDTV signal, input the tri-level sync signal to the G (Y) IN connector.
- When inputting the computer signal shown in item No. 28, set the H SIZE, H SHIFT, V SIZE and V SHIFT to the standard (00) and set ZOOM to ×1 in the PIC SIZE menu, or the picture might oscillate.

Actual on-screen display of the monitor status

On-screen display	Significance
31.5kHz / 60Hz (eg.)	The selected input signal is computer RGB.
525 / 60 (eg.)	The selected input signal is RGB or component video.
NTSC (eg.)	The selected input signal is NTSC.
OTHERS	The input signal is out of the capture range.
NO SYNC	There is no input signal.
MUTING	The sound is muted.
RGB1 RGB	The signal mode of RGB1 is set to RGB.
RGB1 YUV	The signal mode of RGB1 is set to component video.
LINE COMPOSITE	Composite video input is selected at LINE.
LINE Y/C	Y/C video input is selected at LINE.

Adjusting the Picture

While watching the picture, you can adjust contrast, brightness, chroma, phase, and so on, to suit your taste. The adjustments can be carried out for each input signal separately. You can also store the adjusted levels in memory.

Adjusting the Contrast, Brightness, Chroma, and Phase, etc.

Press MENU so that the main menu appears on the monitor screen and select “CONTRAST”, “BRIGHTNESS”, “CHROMA”, “PHASE”, “PICTURE AGC”, “COLOR TEMP” or “SHARPNESS” from the PIC CONTROL menu with ↑/↓.

CONTRAST

Select “CONTRAST” with ↑/↓ and press ENT.
Adjust the contrast with ↑/↓ in the range from MIN (0) to MAX (+100).
↑: to increase picture contrast
↓: to decrease picture contrast

BRIGHTNESS

Select “BRIGHTNESS” with ↑/↓ and press ENT.
Adjust the brightness with ↑/↓ in the range from MIN (–50) to MAX (+50).
↑: to make the picture brighter
↓: to make the picture darker

CHROMA

Select “CHROMA” with ↑/↓ and press ENT.
Adjust the chroma with ↑/↓ in the range from MIN (–50) to MAX (+50).
↑: to increase color intensity
↓: to decrease color intensity

PHASE

Select “PHASE” with ↑/↓ and press ENT.
Adjust the phase with ↑/↓ in the range from MIN (–50) to MAX (+50).
↑: to make overall picture greenish
↓: to make overall picture purplish

Automatic Brightness Control – Enhancing the Image Contrast

If the average brightness of the image is low, the system can automatically raise the contrast level to enhance the brightness. This function works well for displaying dark images.

Select “PICTURE AGC” with ↑/↓ and press ENT.
Set PICTURE AGC to ON or OFF with ↑/↓.

COLOR TEMP (Color Temperature)

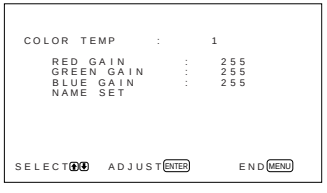
Set the color temperature. You can select HIGH or LOW, or adjust each gain more precisely. Up to six adjusted color temperatures can be registered. You can rename them (up to six characters in length).

1 Select “COLOR TEMP” with ↑/↓ and press ENT.

2 Select the color temperature with ↑/↓ and press ENT.
HIGH: to set the color temperature to high
LOW: to set the color temperature to low
1 – 6: to set the gain more precisely

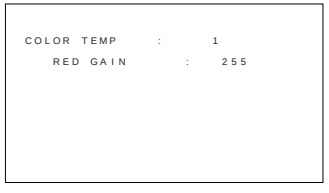
When you select HIGH or LOW, the menu returns to the PIC CONTROL menu.

When you select “1” to “6”
When you select “1” to “6”, the following menu appears on the monitor screen.



(1) Select a number to register with ↑/↓ and press ENT.
The cursor (▶) appears on the monitor screen.

(2) Press ↑/↓ to move the cursor (▶) to the gain that you want to set.
The following menu appears on the monitor screen.

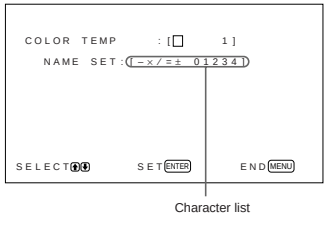


(3) Adjust the gain (10 to 255) with ↑/↓ and press MENU.
The menu returns to the COLOR TEMP menu.

(4) Repeat steps (2) and (3) to set the other gains and press MENU.
The menu returns to the COLOR TEMP menu.

When you rename the adjusted color temperature, follow the steps below.

(5) Press ↑/↓ to move the cursor (▶) to "NAME SET" and press ENT.
The following menu appears on the monitor screen.



(6) Select the character to be changed with ↑/↓ and press ENT.
The background of one character in the character list changes to cyan.

(7) Select a character in the character list with ↑/↓ and press ENT.
The selected character is input.

(8) Repeat steps (6) and (7) until you finish inputting the name, then press MENU.
The menu returns to the COLOR TEMP menu.

SHARPNESS

Change the outline correction level in three levels (HIGH, MID or LOW).

1 Press ↑/↓ to move the cursor (▶) to "SHARPNESS" and press ENT.

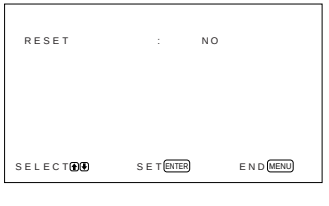
2 Select the outline correction level with ↑/↓ and press ENT.
HIGH: sharper picture
MID: standard value
LOW: softer picture

Notes

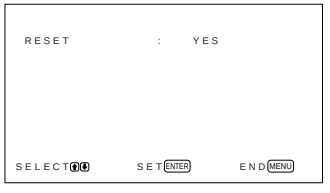
- CHROMA and PHASE controls do not function with an RGB signal.
- PHASE control does not function with a component signal.
- PHASE control does not function with a PAL or SECAM color source.
- Do not change the CHROMA/PHASE (NTSC only) level when the selected signal is black-and-white. Although it has no effect on the current picture, it does affect the picture of color signals such as NTSC or PAL which may be input later.

Restoring the PIC CONTROL Menu Items to Original Settings

1 In the PIC CONTROL menu, Press ↑/↓ to move the cursor (▶) to "RESET" and press ENT.
The following menu appears on the monitor screen.



2 Press ↑/↓.
"NO" changes to "YES".



3 Press ENT.
The PIC CONTROL menu items are restored.

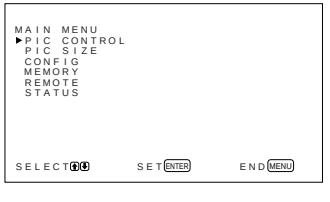
To cancel the reset function, press MENU before pressing ENT.

Resizing and Positioning the Picture

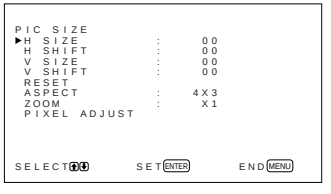
You can shift the position of the picture so that it fits the screen, or adjust the vertical and horizontal size of the picture separately. You can adjust the setting to display the 4:3 image at the more natural 16:9 setting.

Resizing the Picture

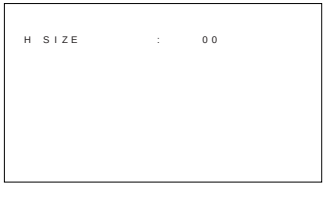
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to "PIC SIZE" and press ENT.
The PIC SIZE menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to "H SIZE" and press ENT.
The following menu appears on the monitor screen.



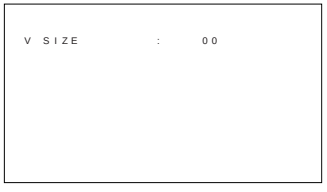
4 Press ↑/↓ to resize the picture.
↑: to expand horizontal size
↓: to reduce horizontal size
The horizontal picture size is indicated on the monitor screen in the range from MIN (–50) to MAX (+50). The factory preset value is 00.

Note

The lower limit of the setting may be above the MIN depending on the input signal type.

5 Press ENT.
The menu returns to the PIC SIZE menu.

6 Press ↑/↓ to move the cursor (►) to “V SIZE” and press ENT.
The following menu appears on the monitor screen.

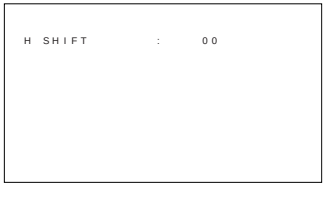


7 Press ↑/↓ to resize the picture.
↑: to expand vertical size
↓: to reduce vertical size
The vertical picture size is indicated on the monitor screen from MIN (–50) to MAX (+50).
The factory preset value is 00.

8 Press ENT.
The menu returns to the PIC SIZE menu.

Adjusting the Picture Position

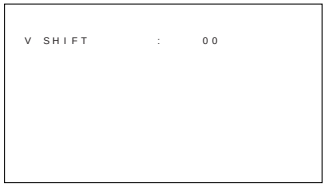
1 In the PIC SIZE menu, press ↑/↓ to move the cursor (►) to “H SHIFT” and press ENT.
The following menu appears on the monitor screen.



2 Press ↑/↓ to shift the picture.
↑: to shift the picture to the right
↓: to shift the picture to the left
The horizontal picture position is indicated on the monitor screen from MIN (–50) to MAX (+50).
The factory preset value is 00.

3 Press ENT.
The menu returns to the PIC SIZE menu.

4 Press ↑/↓ to move the cursor (►) to “V SHIFT” and press ENT.
The following menu appears on the monitor screen.

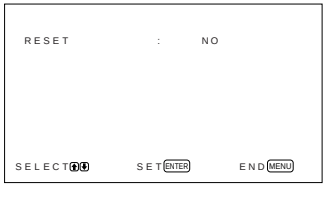


5 Press ↑/↓ to shift the picture.
↑: to shift the picture upward
↓: to shift the picture downward
The vertical picture position is indicated on the monitor screen from MIN (–50) to MAX (+50).
The factory preset value is 00.

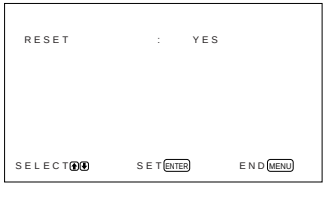
6 Press ENT.
The menu returns to the PIC SIZE menu.

Restoring the Original Picture Size and Position

1 In the PIC SIZE menu, press ↑/↓ to move the cursor (►) to “RESET” and press ENT.
The following menu appears on the monitor screen.



2 Press ↑/↓.
“NO” changes to “YES”.

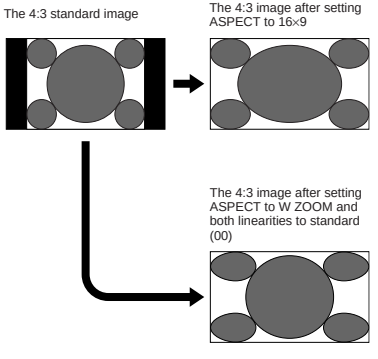


3 Press ENT.
The original picture size and position are restored.

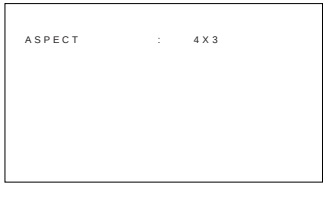
To cancel the reset function, press MENU before pressing ENT.

Enlarging a 4:3 Image to a 16:9 Screen Naturally (Wide Zoom Mode)

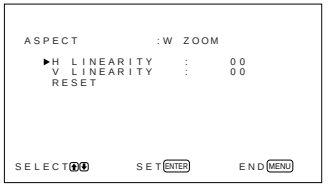
When you ordinarily watch a 4:3 standard image in the 16:9 screen, the image is seen distorted in a horizontal direction due to the difference in proportion. If you use wide zoom mode, the center of the monitor will not be distorted as much and the corners of the monitor will be distorted instead. You can change the linearities by adjusting the H LINEARITY and V LINEARITY settings.


The 4:3 standard image
The 4:3 image after setting ASPECT to 16×9
The 4:3 image after setting ASPECT to W ZOOM and both linearities to standard (00)

1 In the PIC SIZE menu, press ↑/↓ to move the cursor (►) to “ASPECT” and press ENT.
The following menu appears on the monitor screen.



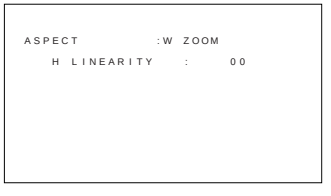
2 Press ↑/↓ to move the cursor (►) to “W ZOOM” and press ENT.
The following menu appears on the monitor screen.



3 If you do not change H LINEARITY or V LINEARITY, press ENT.
The menu returns to the PIC SIZE menu.
When you change H LINEARITY or V LINEARITY, follow the steps below.

4 Press ↑/↓ to move the cursor (►) to “H LINEARITY” or “V LINEARITY” and press ENT.
H LINEARITY: to change the linearity in the horizontal direction
V LINEARITY: to change the linearity in the vertical direction

The following menu appears on the monitor screen. (The illustration below is for selecting the H LINEARITY.)



5 Adjust the screen size with ↑/↓.

To restore wide zoom mode items to their original settings
In the ASPECT menu, select W ZOOM and press ENT. Press ↑/↓ to move the cursor (►) to “RESET” and press ENT. Then select YES with ↑/↓ and press ENT.

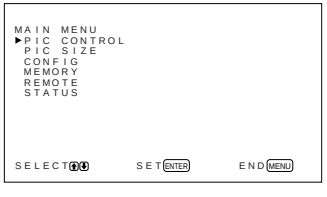
Note

If you use the wide zoom mode, it is recommended that you set the H SIZE, H SHIFT, V SIZE and V SHIFT to the standard (00) . If you change them too much, the wide zoom display may be distorted. Before you use the wide zoom mode, set ZOOM to ×1. If ZOOM is set to ×2, ×3 or ×4, the wide zoom mode cannot be used.

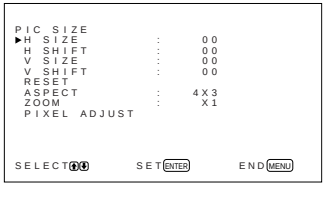
Adjusting the Pixels

If there is too much noise on the edges of the characters or the vertical lines, you can adjust the dot phase and total number of horizontal pixels.

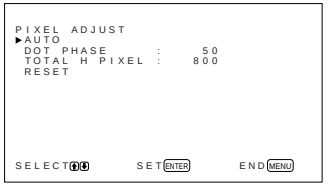
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to “PIC SIZE” and press ENT.
The PIC SIZE menu appears on the monitor screen.



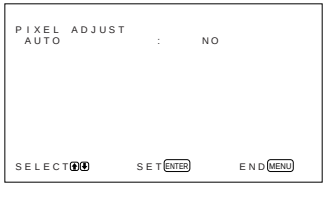
3 Press ↑/↓ to move the cursor (▶) to “PIXEL ADJUST” and press ENT.
The following menu appears on the monitor screen.



4 You can adjust the dot phase and total number of horizontal pixels automatically or manually.

Adjusting automatically

(1) Select AUTO with ↑/↓ and press ENT.
The following menu appears on the monitor screen.



(2) Select YES with ↑/↓ and press ENT.
The dot phase and total number of horizontal pixels are adjusted automatically.

Adjusting manually

(1) Select DOT PHASE or TOTAL H PIXEL with ↑/↓ and press ENT.
The following menu appears on the monitor screen. (The illustration below is for selecting the DOT PHASE.)

(2) Adjust the dot phase or total number of horizontal pixels with ↑/↓ and press ENT.

To restore PIXEL ADJUST menu items to their original settings

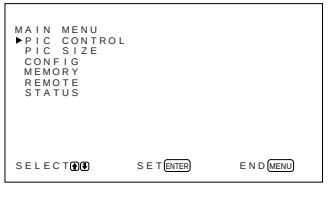
In the PIXEL ADJUST menu, press ↑/↓ to move the cursor (▶) to “RESET” and press ENT. Then select YES with ↑/↓ and press ENT.

Using the Memory Function

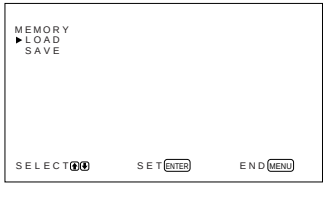
You can save the current picture setting for each input signal using the MEMORY function. The saved settings can be restored whenever necessary. The items in the PIC CONTROL and PIC SIZE menus can be memorized. You can save the picture settings of up to twenty input signals. You can name the settings of the items (up to 10 characters in length).

Storing the Current Setting

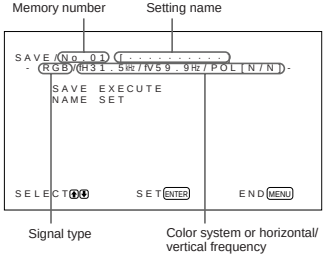
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to “MEMORY” and press ENT.
The MEMORY menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to “SAVE” and press ENT.
The following menu appears on the monitor screen.

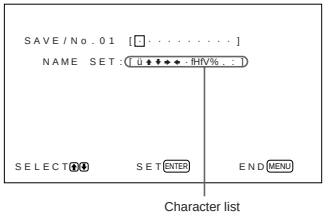


If there is no data in the selected memory number, the “– – EMPTY – –” message appears on the monitor screen in cyan. The signal type and the color system or horizontal/vertical frequency are displayed in cyan (showing that the signal type of the selected memory number is the same as that of the current setting) or in yellow (showing that the signal type of the selected memory number is not the same as that of the current setting).

4 Select a memory number (01 to 20) with ↑/↓ and press ENT.
The cursor (▶) appears on the monitor screen.

5 Press ↑/↓ to move the cursor (▶) to “SAVE EXECUTE” and press ENT.
The current data is stored under the selected memory number. The “SAVE COMPLETED” message appears for about five seconds.
When you name the setting, follow the steps below.

6 Press ↑/↓ to move the cursor (▶) to “NAME SET” and press ENT.
The following menu appears on the monitor screen.



7 Select the character to be changed with ↑/↓ and press ENT.
The background of a character in the character list changes to cyan.

8 Select a character in the character list with ↑/↓ and press ENT.
The selected character is input.

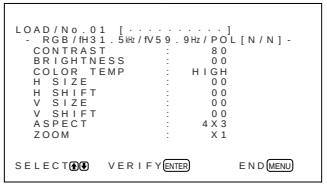
9 Repeat steps **7** and **8** until you finish inputting the name, then press MENU.
The menu returns to the SAVE menu.

Note

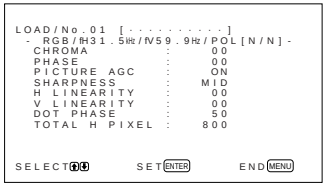
If the storing of the setting fails, the “SAVE ERROR” message appears on the monitor screen. Try to store the setting again.

Calling Up a Stored Setting

1 In the MEMORY menu, press ↑/↓ to move the cursor (▶) to “LOAD” and press ENT.
The first page of the stored settings appears on the monitor screen.



2 Select a memory number (01 to 20) with ↑/↓ and press ENT.
The second page of the stored settings appears on the monitor screen.



The signal type and the color system or horizontal/vertical frequency are displayed in cyan (showing that the signal type of the selected memory number is the same as that of the current setting and you can call up the stored setting) or in red (showing that the signal type of the selected memory number is not the same as that of the current setting and you cannot call up the stored setting).

3 Press ENT.
The “LOAD COMPLETED” message appears for about five seconds and the picture is adjusted to the selected setting.

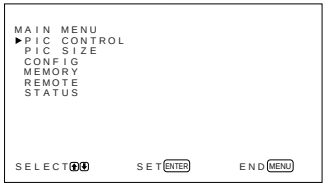
Note

If the loading fails, the “LOAD ERROR” message appears on the monitor screen. Try to load the setting again.

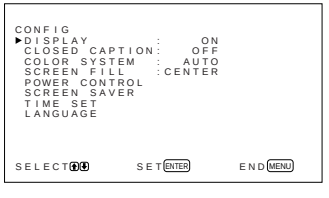
Selecting the On-screen Language

You can select the on-screen language from among English, German, French, Italian, Spanish or Japanese.

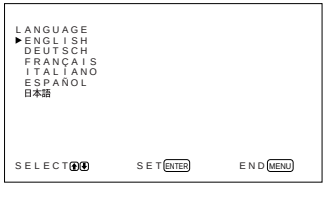
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to “CONFIG” and press ENT.
The CONFIG menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to “LANGUAGE” and press ENT.
The following menu appears on the monitor screen.



4 Press ↑/↓ to move the cursor (▶) to the desired language and press ENT.
The on-screen language is switched to the one you selected.
ENGLISH: English
DEUTSCH: German
FRANÇAIS: French
ITALIANO: Italian
ESPAÑOL: Spanish
日本語**:** Japanese

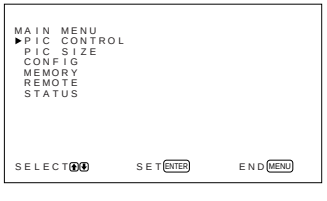
5 Press MENU.
The menu returns to the CONFIG menu.

Reducing Afterimage/ Ghosting (Screen Saver Function)

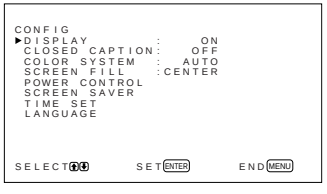
If a bright image that does not change is displayed on a screen (e.g., PC) for a long time, an afterimage (ghosting) may occur. To reduce this afterimage, this monitor has a screen saver function. The screen saver function has two screen savers. One screen saver reverses the image (PIC INVERSION) while the other automatically changes the display position (PIC ORBITING).

Reversing the Image

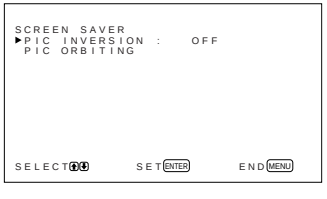
1 Press MENU.
The main menu appears on the monitor screen.



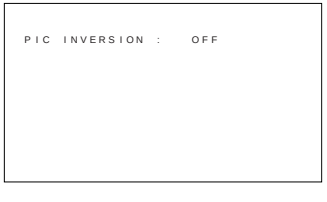
2 Press ↑/↓ to move the cursor (▶) to “CONFIG” and press ENT.
The CONFIG menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to “SCREEN SAVER” and press ENT.
The following menu appears on the monitor screen.

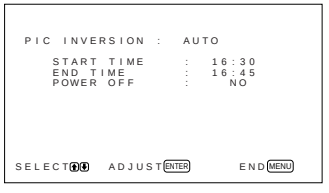


4 Press ↑/↓ to move the cursor (▶) to “PIC INVERSION” and press ENT.
The following menu appears on the monitor screen.



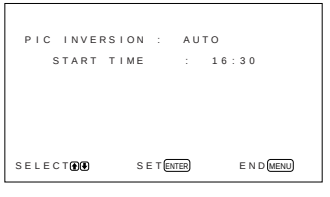
5 Select the PIC INVERSION mode.
OFF: to set the PIC INVERSION to OFF
ON: to set the PIC INVERSION to ON
AUTO: Carry out the PIC INVERSION process once a day.

When you select AUTO, the following menu appears.



(1) Press ENT.
The cursor (▶) appears on the monitor screen.

(2) Press ↑/↓ to move the cursor (▶) to “START TIME” and press ENT.
The following menu appears and the background of the hour is displayed in cyan.



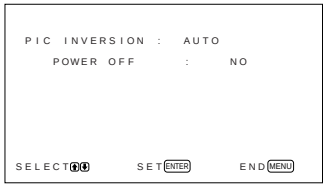
(3) Set the hour when the image is to be reversed with ↑/↓ and press ENT.
The hour is defined and the background of the minute is displayed in cyan.

(4) Set the minute with ↑/↓ and press MENU.
The minute is defined and the menu returns to the PIC INVERSION menu.

(5) Similarly, set the time when the PIC INVERSION function is to be cancelled.
The display will be reversed at the START TIME and will return to the original display at the END TIME. This cycle is carried out automatically once a day.

To set the change to the standby mode at the END TIME

1 After selecting AUTO for PIC INVERSION mode, select POWER OFF and press ENT.
The following menu appears on the monitor screen.



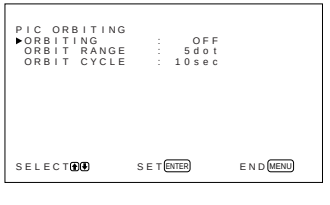
2 Select YES with ↑/↓ and press MENU.
The monitor changes to standby mode at the designated END TIME.

Notes

- The power off function, power saving function and on/off timer function in the POWER CONTROL menu cannot be used simultaneously. When one of those functions is set to YES, “– – – –” appears next to the others and their functions are not available.
- If you set START TIME and END TIME to the same time, the setting of START TIME takes priority over that of END TIME. The display does not return to the original display at the END TIME.

Changing the Display Position Automatically

1 In the SCREEN SAVER menu, press ↑/↓ to move the cursor (▶) to “PIC ORBITING” and press ENT.
The following menu appears on the monitor screen.



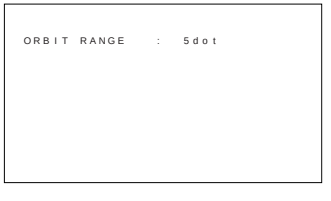
2 Press ↑/↓ to move the cursor (▶) to “ORBITING” and press ENT.
The following menu appears on the monitor screen.

3 Select the ORBITING mode with ↑/↓.
OFF: Cancel the PIC ORBITING function.
ON: Set the PIC ORBITING function.

4 Press MENU.
The menu returns to the PIC ORBITING menu.

5 Select ORBIT RANGE (moving distance) or ORBIT CYCLE (time) with ↑/↓ and press ENT.
The following values can be selected:
ORBIT RANGE: 5dot, 10dot, 15dot, 20dot
ORBIT CYCLE: 10sec, 30sec, 1min, 5min

The following menu appears on the monitor screen. (The illustration below is for selecting ORBIT RANGE.)



6 Adjust the ORBIT RANGE or ORBIT CYCLE with ↑/↓ and press MENU.

When both PIC INVERSION and PIC ORBITING are set to ON

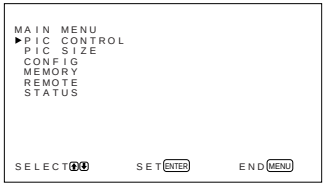
If the PIC ORBITING function is actuated while the picture is reversed, the reversed picture is displayed changing position.

Controlling Power On/Off Automatically (Power Control Function)

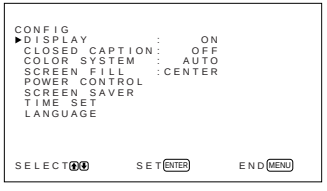
This monitor has two power controlling functions. You can set it to turn off the power automatically after a certain period if there is no input signal from the RGB1 or RGB2 connectors (POWER SAVING function). You can set the time when the power automatically turns on/off (ON/OFF TIMER function).

Power Saving Function

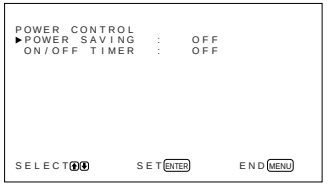
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to “CONFIG” and press ENT.
The CONFIG menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to “POWER CONTROL” and press ENT.
The following menu appears on the monitor screen.



4 Press ↑/↓ to move the cursor (▶) to “POWER SAVING” and press ENT.
The following menu appears on the monitor screen.

5 Press ↑/↓ to select the length of the time until the change to power saving mode.
OFF: The power saving function does not work.
5min: Change to the power saving mode after five minutes if there is no input signal.
10min: Change to the power saving mode after 10 minutes if there is no input signal.

The power indicator flashes when the unit is in the power saving mode.

To cancel the power saving function

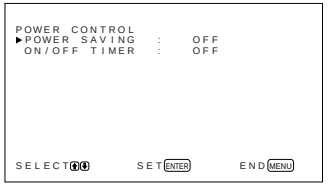
- Input the sync signal again.
- Press the ⏻ switch on the control panel or the POWER switch on the Remote Commander.

Signal specification for using the power saving function

RGB1: When the sync signal is connected to the HD/COMP IN connector.
RGB2: When the sync signal is connected to the 13th pin of the RGB IN (D-sub 15-pin) connector.

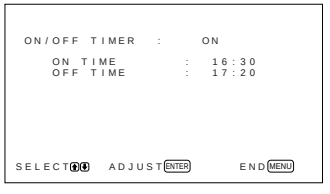
On/Off Timer Function

1 In the CONFIG menu, Press ↑/↓ to move the cursor (▶) to “POWER CONTROL” and press ENT.
The following menu appears on the monitor screen.



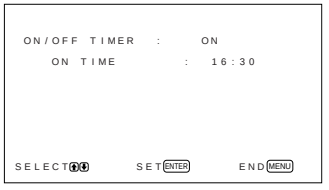
2 Press ↑/↓ to move the cursor (▶) to “ON/OFF TIMER” and press ENT.
The following menu appears on the monitor screen.

3 Select ON with ↑/↓ and press ENT.
The following menu appears on the monitor screen.



4 Press ENT.
The cursor (▶) appears on the monitor screen.

5 Press ↑/↓ to move the cursor (▶) to “ON TIME” and press ENT.
The following menu appears and the background of the hour is displayed in cyan.



6 Set the hour with ↑/↓ and press ENT.
The hour is defined and the background of the minute is displayed in cyan.

7 Set the minute with ↑/↓ and press MENU.
The minute is defined and the menu returns to the ON/OFF TIMER menu.

8 Similarly, set the OFF TIME.

Notes

- The power saving function does not work when the signal is input from the LINE connectors.
- If the sync signal is not connected to the HD/COMP IN connector, the monitor does not turn on even if the sync signal is input. Be sure to set POWER SAVING to OFF when only the RGB signal is connected.
- If the sync signal is not connected to the 13th pin of the RGB IN (D-sub 15-pin) connector, the monitor does not turn on even if the sync signal is input. Be sure to set POWER SAVING to OFF when only the RGB signal is connected.
- The power saving function, on/off timer function and power off function in the PIC INVERSION mode cannot be used simultaneously. When one of those functions is set to ON, “– – – –” appears next to the others and their functions are not available.
- If you set ON TIME and OFF TIME to the same time, the setting of ON TIME takes priority over that of OFF TIME. The monitor does not turn off at the OFF TIME.

Self-diagnosis Function

The unit has a self-diagnosis function.
This function displays the monitor's condition with the ⏻ indicator flashing and numbers on the SERVICE CODE indicator on the left connector panel. The numbers inform you of the monitor's current condition.
When the unit is working properly, only the dot at the lower-right position on the SERVICE CODE indicator flashes.
If the ⏻ indicator flashes, check the number and contact your authorized Sony dealer.

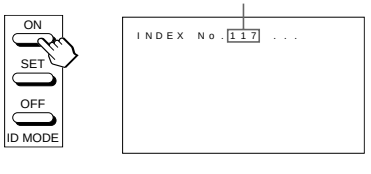
1 Check the two-digit number on the SERVICE CODE indicator.
The indicator shows one number, or multiple numbers alternately in one second intervals.

2 Unplug the unit.
Inform your authorized Sony dealer of the number.

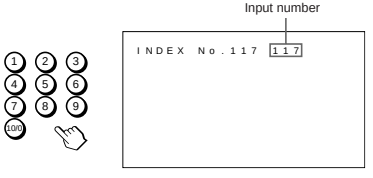
Operating a Specific Monitor With the Remote Commander

Using the supplied Remote Commander, you can operate a specific monitor without affecting other monitors that are installed at the same time.

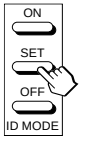
1 Press ID MODE ON on the Remote Commander.
Monitor index numbers appear in white characters on all the monitors. (Every monitor is allocated an individual preset index number from 1 to 255.)
See "To change the index number" in the left-hand column on the next page to change the index number.



2 Input the index number of the monitor you want to operate using the 0 – 9 buttons on the Remote Commander.
The input number appears right next to the index number of each monitor.

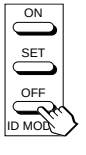


3 Press ID MODE SET.
The character on the selected monitor changes to cyan while others change to red.



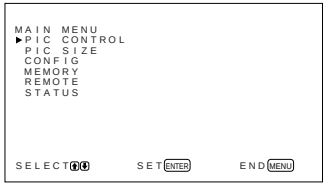
You can operate only the monitor specified. (All operations are available in ID mode except POWER ON/OFF.)

4 After the necessary adjustment, press ID MODE OFF.
The monitor returns to the normal mode.

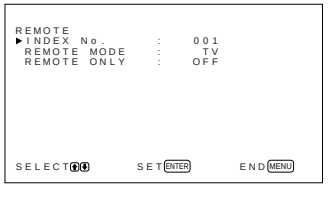


To change the index number
You can change the index number if necessary.
When you change the number, use the buttons on the monitor.

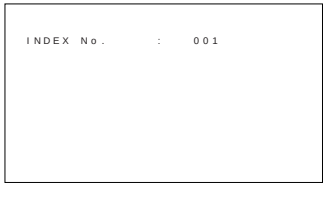
1 Press MENU.
The main menu appears on the monitor screen.



2 Press ↑/↓ to move the cursor (▶) to "REMOTE" and press ENT.
The REMOTE menu appears on the monitor screen.



3 Press ↑/↓ to move the cursor (▶) to "INDEX No." and press ENT.
The following menu appears on the monitor screen.



4 Select the index number with ↑/↓ and press ENT.
The menu returns to the REMOTE menu.

Using Other Remote Commander Models

The following operations can be carried out.
• Power on/off
• Input selection
• Menu operations
• Picture adjustments: contrast, phase and chroma
• On-screen display on/off

The operations available and the buttons to be used for each operation are limited depending on each Remote Commander. See the table below.

Remote Commander model		**RM-854**	**RM-1271**	**RM-PJ1292**	**RM-PJ1000**
REMOTE MODE setting		**TV**	**PJ**	**PJ**	**PJ**
Input selection	RGB1	RGB	A	A	A
	RGB2	—	B	B	B
	LINE	LINE1	VIDEO	VIDEO	VIDEO
Menu operation	MENU	MENU	PAGE or ←	PAGE or ←	MENU or ←
	ENTER	ENTER	→	→	ENTER or →
	+	+	↑	↑	↑
	–	–	↓	↓	↓
Picture adjustment	Contrast	CONTRAST+/–	CONTR+/–	CONTR+/–	CONTR+/–
	Chroma	CHROMA+/–	COLOR+/–	COLOR+/–	COLOR+/–
	Phase	PHASE+/–	HUE+/–	HUE+/–	HUE+/–
On-screen information		DISPLAY	—	STATUS ON	STATUS ON

Specifications

Video processing

Preset signal	Input: formats *(See page 22 (GB).)*
Sampling rate	13.5 to 140 MHz
Panel system	AC-type Plasma Display Panel
Display resolution	510A2W: 1 024 dots × 1 024 lines 500A3W: 852 dots × 480 lines
Pixel pitch	510A2W: 0.90 (horizontal) × 0.51 (vertical) mm (1/16 × 1/32 inches) 500A3W: 1.08 (horizontal) × 1.08 (vertical) mm (1/16 × 1/16 inches)
Picture size	510A2W: 921 (horizontal) × 522 (vertical) mm (36 3/8 × 20 5/8 inches) 500A3W: 920 (horizontal) × 518 (vertical) mm (36 1/4 × 20 1/2 inches)
Panel size	510A2W: 42-inch (diagonal 1 058 mm) 500A3W: 42-inch (diagonal 1 056 mm)

Inputs and Outputs

RGB1

R (R-Y)/ G (Y)/B (B-Y) IN
BNC-type (×3)
0.714 Vp-p/non-composite 75-ohm (automatic termination)
1 Vp-p/composite 75-ohm (automatic termination)

SYNC IN (HD/COMP, VD)
BNC-type (×2)
H (or composite) SYNC, V SYNC, 1 to 5 Vp-p high impedance

AUDIO IN (L, R) Phono jack (×2)
500 mVrms, high impedance

R (R-Y)/ G (Y)/B (B-Y) OUT
BNC-type (×3) Loop-through

SYNC OUT (HD/COMP, VD)
BNC-type (×2) Loop-through
H (or composite) SYNC, V SYNC

AUDIO OUT (L, R)
Phono jack (×2) Loop-through

RGB2

RGB IN D-sub 15-pin *(See "Pin assignment" on page 40 (GB).)*

AUDIO IN (L, R) Phono jack (×2)
500 mVrms, high impedance

LINE (NTSC, PAL, SECAM, NTSC4.43, PAL60)

VIDEO IN BNC-type (×1)
Composite video, 1 Vp-p ±2 dB sync negative, 75-ohm (automatic termination)

Y/C IN Mini DIN 4-pin type (×1)
Y (luminance): 1 Vp-p ±2 dB sync negative, 75-ohm (automatic termination)
C (chrominance): Burst 0.286 Vp-p ±2 dB (NTSC), 75-ohm (automatic termination)
Burst 0.3 Vp-p ±2 dB (PAL), 75-ohm (automatic termination)

AUDIO IN (L, R) Phono jack (×2)
500 mVrms, high impedance

VIDEO OUT BNC-type (×1) Loop-through

Y/C OUT Mini DIN 4-pin type (×1) Loop-through

AUDIO OUT (L, R)
Phono jack (×2) Loop-through

MONITOR OUT AUDIO (L, R)
Phono jack (×2)
Maximum 500 mVrms (Variable output), high impedance

CONTROL S (IN, OUT)
Mini jack (stereo) (×2)
5 Vp-p

REMOTE (RS-232C)
Mini DIN 8-pin type (×1)

SPEAKERS 6 to 16 ohms, 7 W + 7 W (when the impedance is 8 ohms)

General

Power requirements
510A2W: 100 to 120 V AC, 50/60 Hz, 4.7 A/410 W
220 to 240 V AC, 50/60 Hz, 2.2 A/400 W
500A3W: 100 to 120 V AC, 50/60 Hz, 3.9 A/380 W
220 to 240 V AC, 50/60 Hz, 2.0 A/360 W

Operating conditions
Temperature: 0 °C to 35 °C (32 °F to 95 °F)
Humidity: 20% to 90% (no condensation)
Atmospheric pressure: 700 to 1 060 hPa

Storing/transporting conditions
Temperature: –10 °C to +40 °C (14 °F to 104 °F)
Humidity: 20% to 90% (no condensation)
Atmospheric pressure: 700 to 1 060 hPa

Dimensions 1 036 × 636 × 152 mm (40 7/8 × 25 1/8 × 6 inches) (w/h/d)

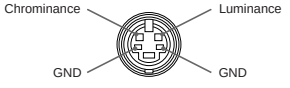
Mass 45 kg (99 lb 3 oz)

Supplied accessories
AC power cord (1)
AC plug holder (1)
Remote Commander RM-921 (1)
Size AA (R6) batteries (2)
Ferrite core (2)
Foot support bracket (2)
Screws for foot support bracket (6)
Monitor stabilizer (2)
Operating instructions (1)

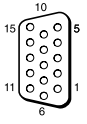
Design and specifications are subject to change without notice.

Pin assignment

Y/C jack (Mini DIN 4-pin)



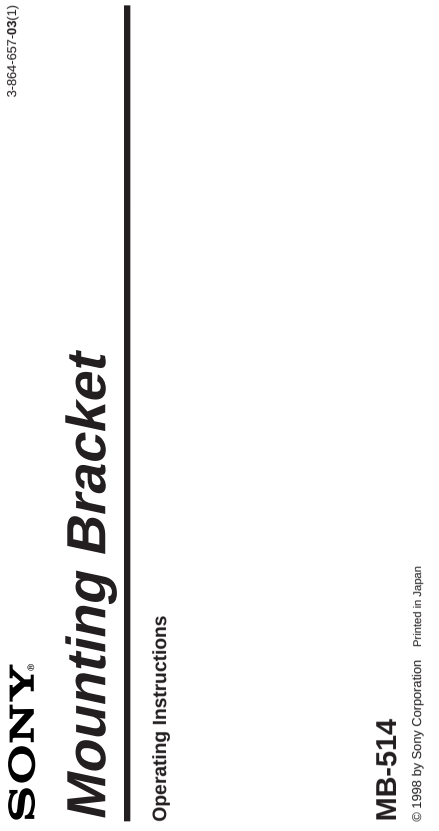
RGB IN connector (D-sub 15-pin)



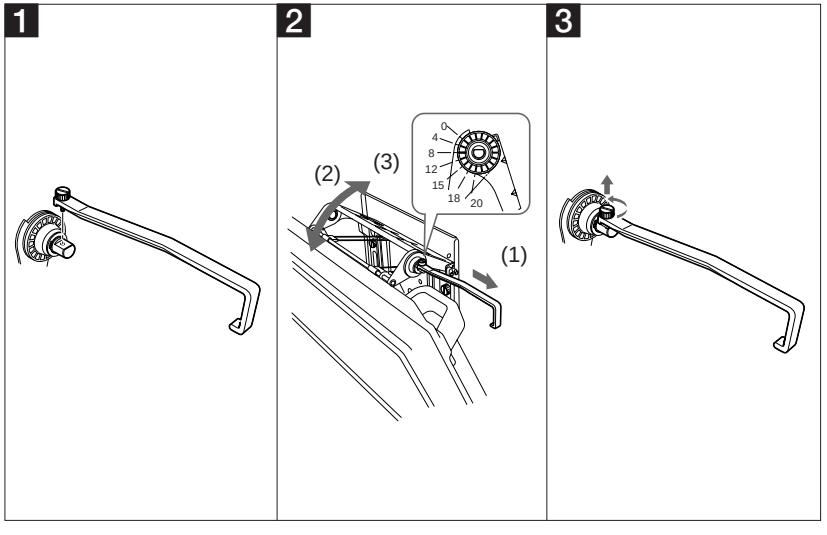
Pin No.	Signal
1	Red video or R-Y
2	Green video or Y
3	Blue video or B-Y
4	Ground
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	Not used
10	Ground
11	Ground
12	SDA
13	H sync or composite sync
14	V sync
15	SCL

This section is reprinted from operation manual.

1-2. MB-514 Operating Instructions



Changing the Angle of the Monitor



English

You can change the angle of the monitor panel by adjusting the angle of the mounting bracket.

Note

If you have any questions about installing the mounting bracket, contact your authorized Sony dealer.

1 Attach the handle on the mounting bracket with the supplied screw (provided with the handle).

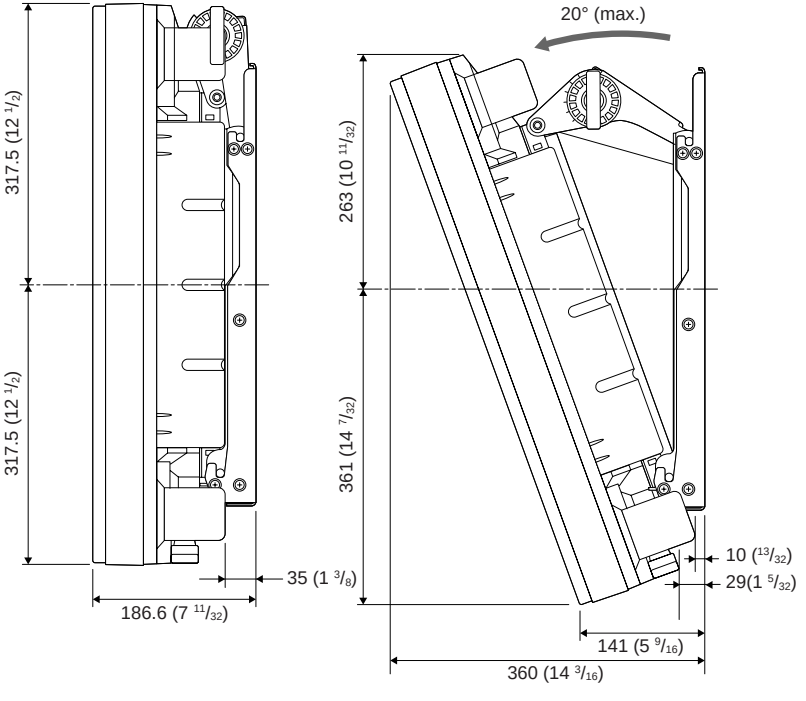
2 Adjust the monitor panel angle.
You can change the angle from 0° to 20° (7 levels).
(Approx. 0°, 4°, 8°, 12°, 15°, 18° and 20°)
(1) Pull the handle down to unsnap the lock.
(2) Push the panel to the desired angle.
(3) Let go of the handle and adjust the panel angle so it can be locked.

See the angle marks.

3 Remove the handle.

Store the handle with the Operating Instructions.

Dimensions of the assembled bracket



Design and specifications are subject to change without notice.

This section is reprinted from installation manual.

SONY

3-864-658-**04**(1)

Mounting Bracket

Installation Manual for Dealers

MB-514

© 1998 by Sony Corporation

PFM-500A3WE/500A3WG/500A3WU/510A2WE/510A2WG/510A2WU

WARNING

Install the monitor on a wall that can hold a weight of at least 400kg (881lb14 oz). Reinforce the wall, if needed.

Table of contents

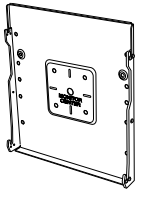
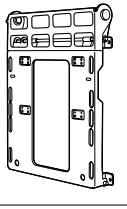
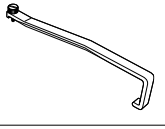
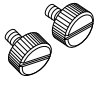
English

Overview 5
Parts List 5
Installation 6
Specifications 12

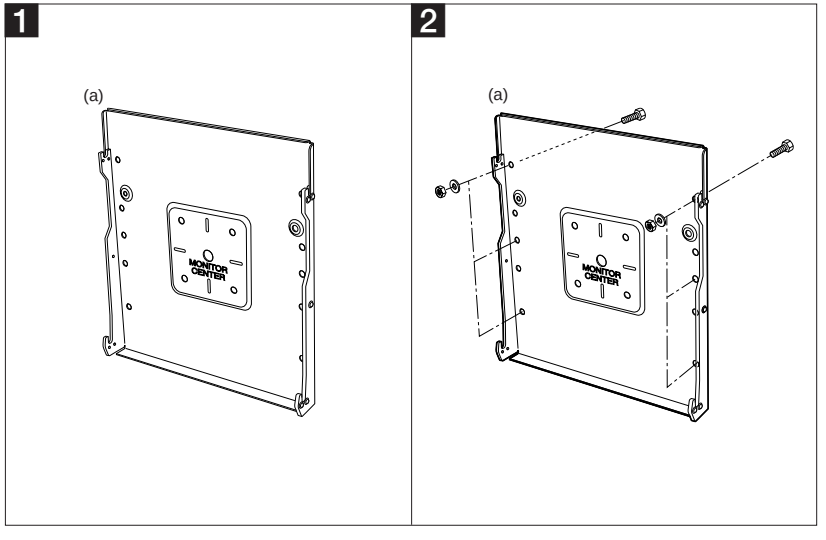
Overview

The mounting bracket MB-514 is designed to install the Sony flat panel monitor on a wall.

Parts List

(a)	**Wall bracket (1)**	
(b)	**Mounting bracket (1)**	
(c)	**Handle (1)**	
(d)	**Knob (2)**	
(e)	**Screw M5 (8)**	

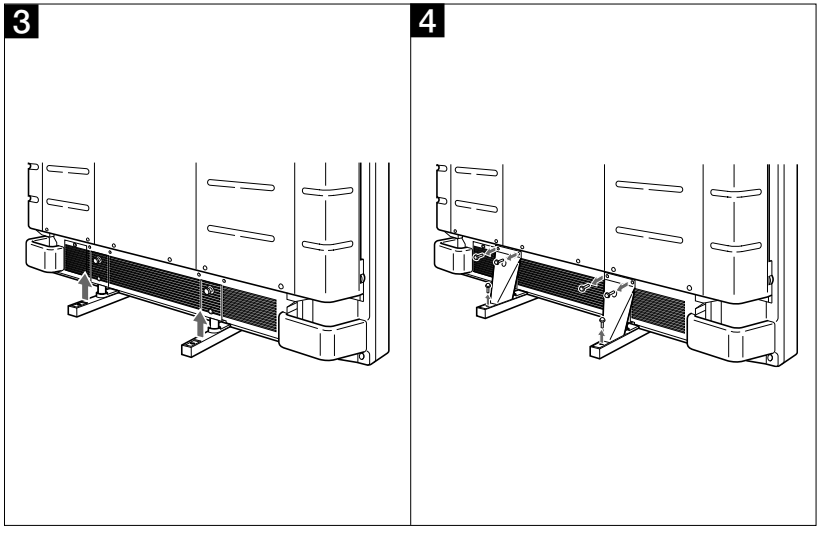
Installation



English

1 Decide where on the wall you want to install the wall bracket (a).
The center hole of the wall bracket will be matched the center of the monitor panel.

2 Install the wall bracket (a) on the wall.
Use six M8 bolts or concrete anchors, six nuts and six washers (not supplied).



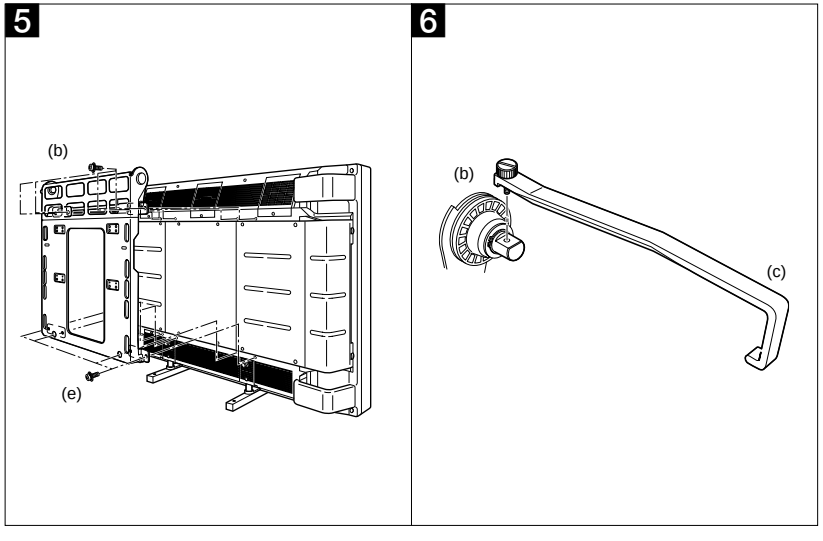
English

3 Pull down the retractable feet and stand the monitor up.
For details on using the retractable feet, see the Operating Instructions for the Sony flat panel monitor.

If the retractable feet and the foot support brackets are already installed on the monitor, go to Step 4. Otherwise, go to Step 5.

4 Remove the foot support brackets from the retractable feet.
For details on removing the foot support brackets, see the Operating Instructions for the Sony flat panel monitor.

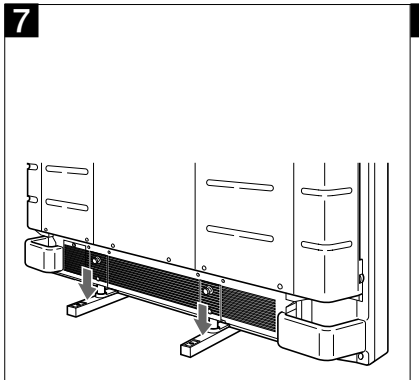
Installation

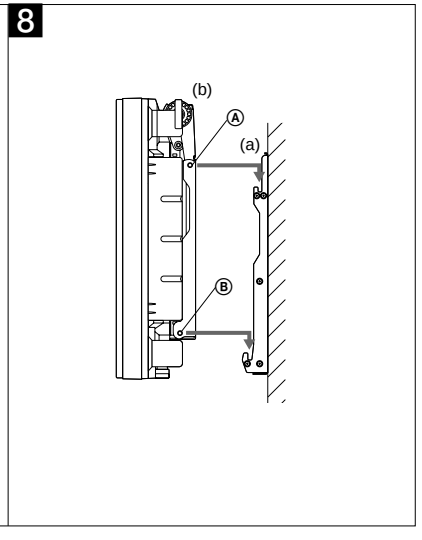


English

5 Install the mounting bracket (b) on the flat monitor. Match the mounting bracket screw holes to the monitor screw holes, then insert and tighten eight M5 screws (e) to lock the bracket onto the monitor.

6 Attach the handle (c) on the mounting bracket (b) with the supplied screw (provided with the handle).





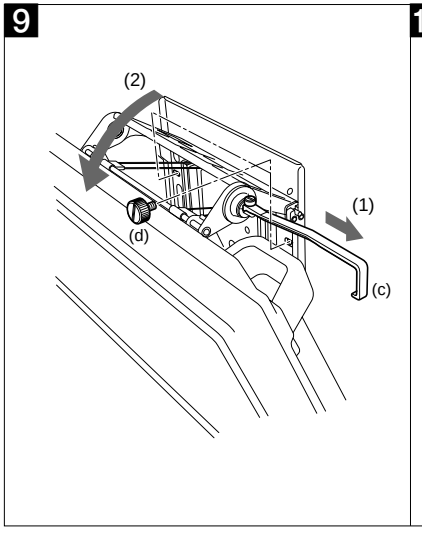
English

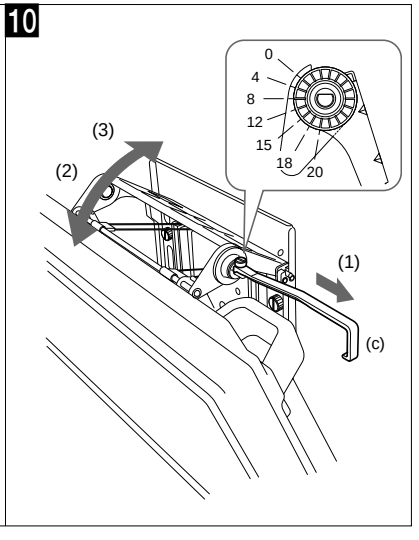
7 Store the retractable feet.
For details on using the retractable feet, see the Operating Instructions for the Sony flat panel monitor.

8 Install the flat monitor with the mounting bracket (b) on the wall bracket (a).
Hook two mounting bracket shafts Ⓐ, Ⓑ on the wall bracket grooves.

Note

Make sure that the shafts hook properly into the grooves.





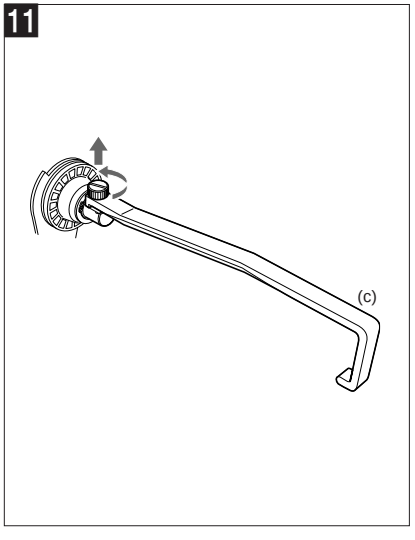
English

9 Lock the mounting bracket shafts (hooked in Step 8) by turning two knobs (d) so that the shafts do not move vertically.
Pull the handle (c) out (installed in Step 6) and unsnap the lock. Pull down the monitor panel so the mounting bracket angle is fully extended. Turn two knobs (d) and lock the monitor panel.

10 Adjust the monitor panel angle.
You can change the angle from 0° to 20° (7 levels). (Approx. 0°, 4°, 8°, 12°, 15°, 18° and 20°)
(1) Pull the handle (c) down to unsnap the lock.
(2) Push the panel to the desired angle.
(3) Let go of the handle and adjust the panel angle so it can be locked.

See the angle marks.

11



English

11 Loosen the screw and remove the handle.

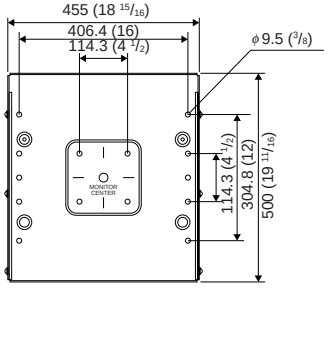
Store the handle with the Operating Instructions.

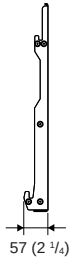
Specifications

Dimensions

Wall bracket

(a)

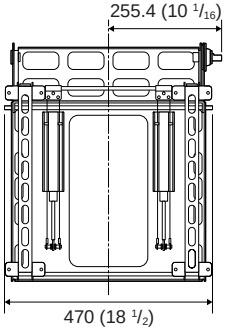


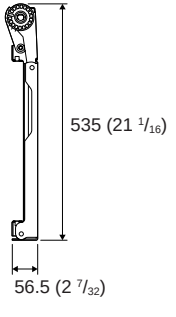


Mass Approx. 5.2kg (11lb7oz)

Mounting bracket

(b)

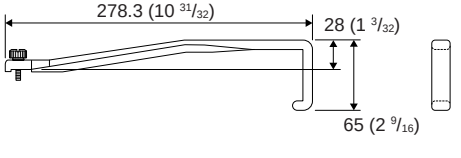




Mass Approx. 5.8kg (12lb13oz)

Handle

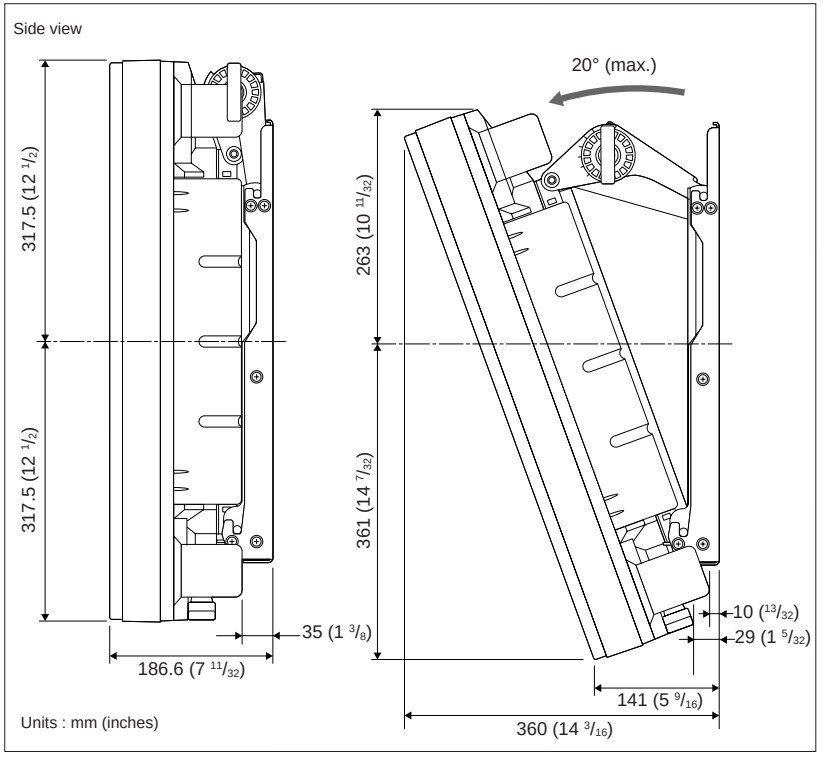
(c)



Mass Approx. 130g (60oz)

Units : mm (inches)

Dimensions of the assembled bracket



Design and specifications are subject to change without notice.

4-074-891-**01**(1)

SONY

Input Adaptor

Operating Instructions

BKM-500

Sony Corporation © 1999 Printed in Japan

English

WARNING

Owner's Record

The model and serial numbers are located on the rear. Record the model and serial numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. BKM-500 Serial No._____

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Do not open the cabinet.
Refer servicing to qualified personnel only.

For installation, consult your nearest Sony dealer.

For the customers in the U.S.A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Europe

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This section is reprinted from operation manual.

English

For BKM-500 Users

This Input Adaptor is for the PFM-500A/510A Series Sony Flat Panel Monitors. You can use the adaptor after installing it on the monitor.
For details on how to operate the Input Adaptor, refer to the Operating Instructions for the monitor.

For details on installation, contact your authorized Sony dealer.

Sony online http://www.world.sony.com/

Printed on recycled paper

SONY

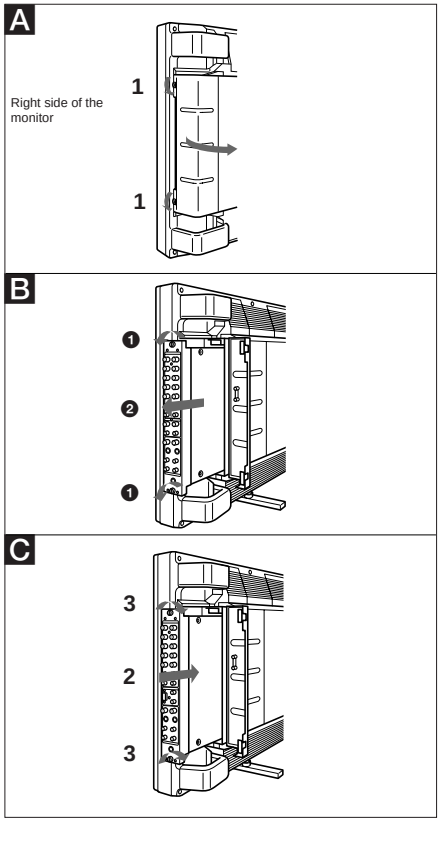
4-074-892-**01** (1)

Input Adaptor

Installation Manual for Dealers

BKM-500

Sony Corporation ©1999 Printed in Japan



English

Follow the steps below to install the Input Adaptor to the PFM-500A/510A series Flat Panel Monitors.

Installing the Input Adaptor (Figures A, B and C)

Before installation

- Before installation, make sure that the power to all the equipment is off. To turn the monitor completely off, press the ⏻ switch so that the monitor changes to standby mode, then disconnect the power cable from the wall outlet.
- If the monitor has been installed on a wall, remove it from the wall.
- If you are using the SS-X500A Speaker System, remove the right speaker.
- Install the Input Adaptor to the monitor on a stable, flat and horizontal surface. Lock the monitor by using the retractable feet.

1 On the right side of the monitor, locate the screws that lock the panel cover on the monitor. Loosen the screws by turning them counterclockwise and open the cover. A

If another connector panel has been installed on the monitor, remove the connector panel as follows:

❶ Loosen the two screws that are at the top and bottom of the right connector panel.
You can now remove the connector panel. B

❷ Slowly pull out the connector panel from the monitor. B

2 First make sure that the direction (top/bottom) of the Input Adaptor, then correct and insert it into the monitor. Make sure that the two connectors inside the monitor are connected firmly. C

3 Tighten the top and the bottom screws. C

4 Connect the required cables. Close the panel cover (opened in Step **1**) and lock it with the cover screws.

Caution

Do not touch the connectors in the monitor. Doing so may be result in injury to yourself or damage to the connectors.

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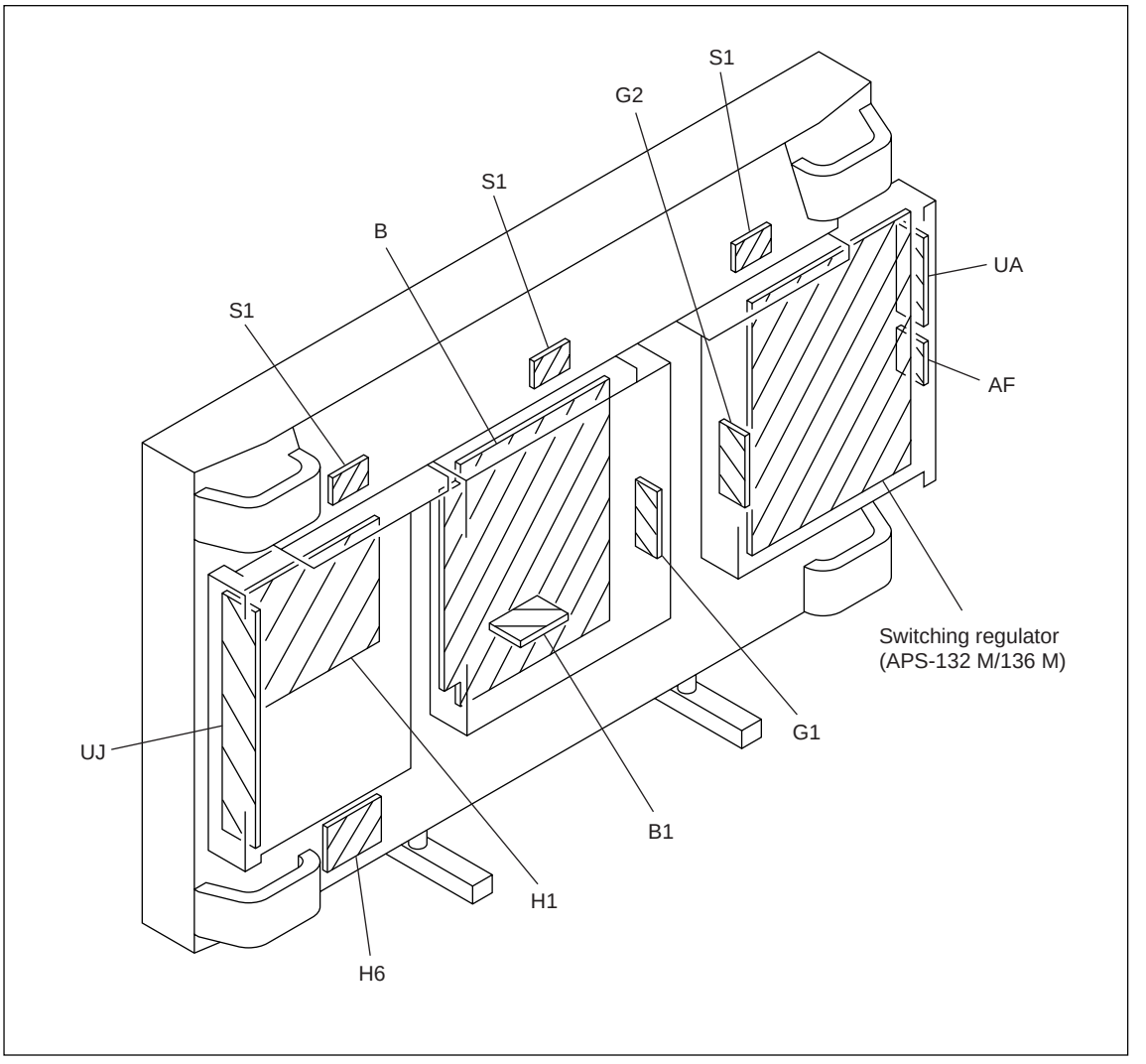
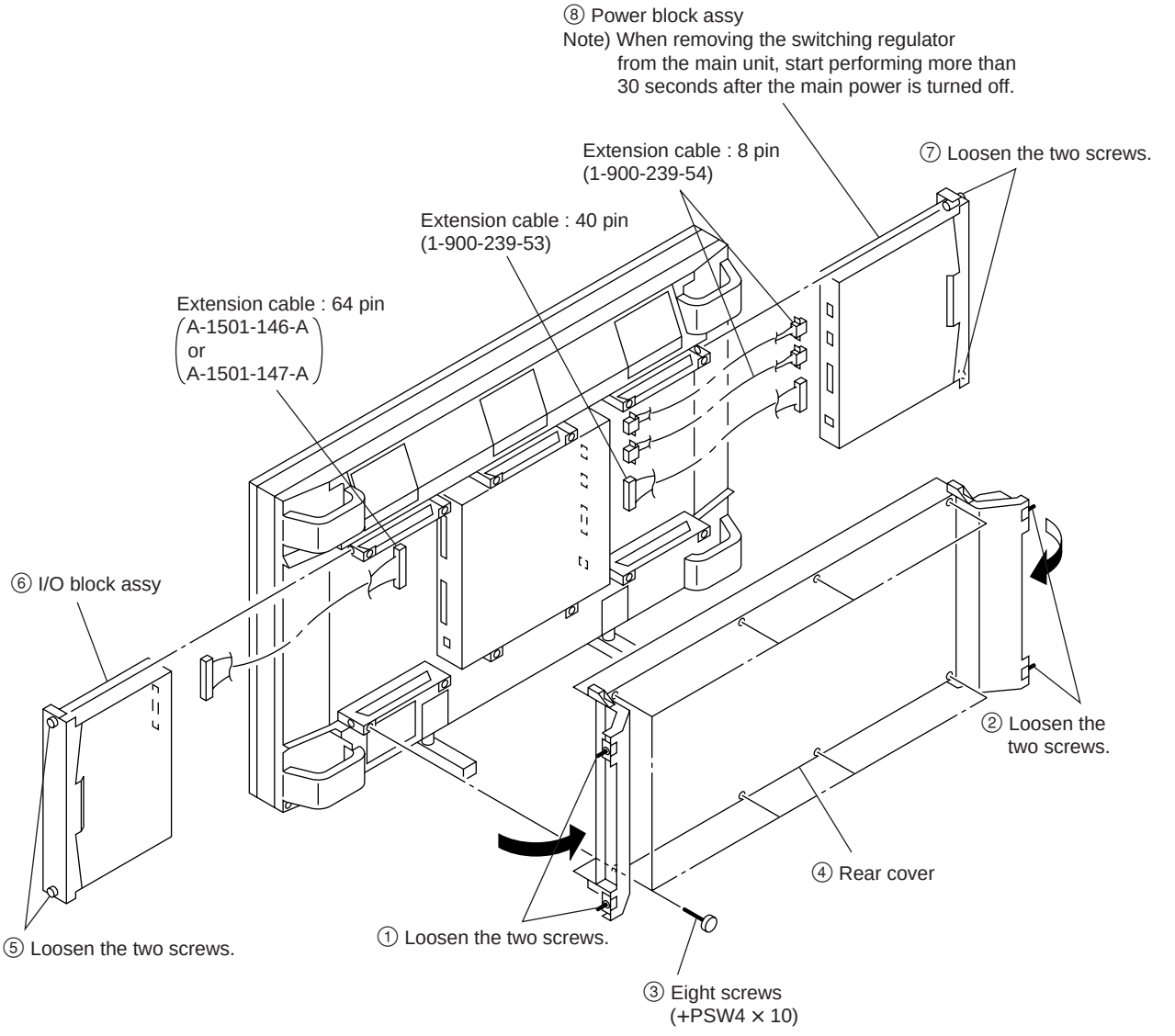
Section 2
Service Informations

2-1. Circuit Boards Location

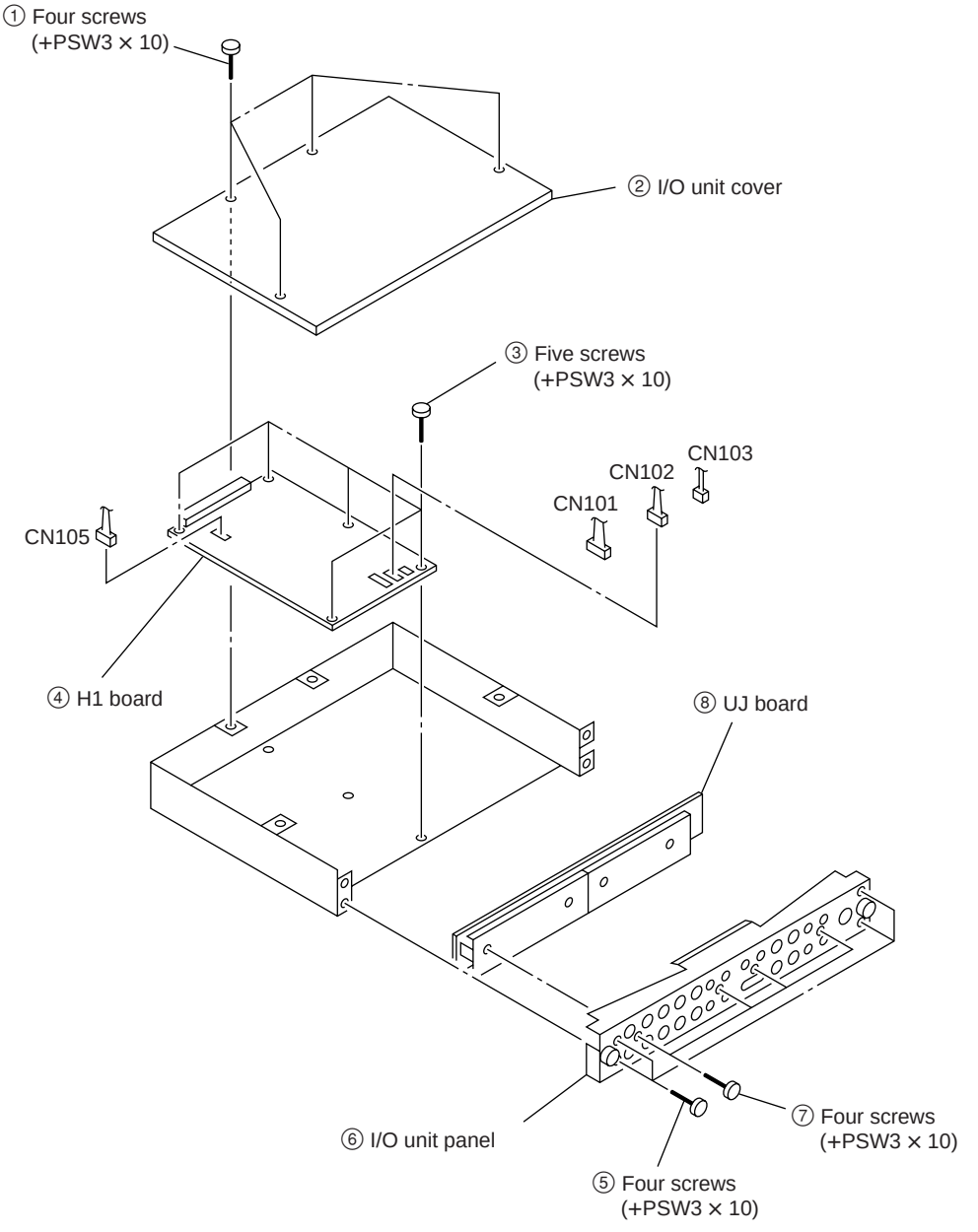


2-2. Disassembly

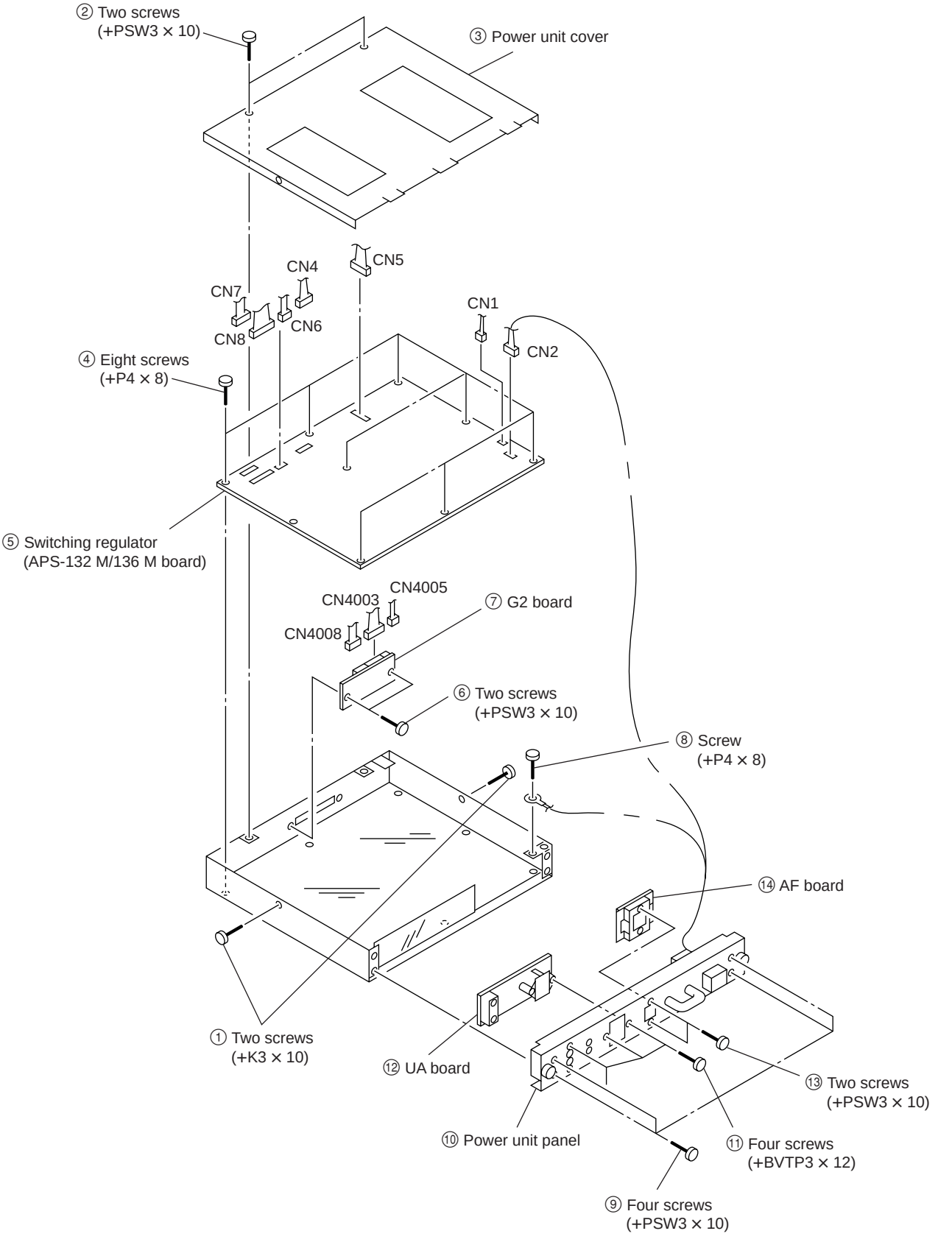
2-2-1. I/O Block Assy and Power Block Assy Removal and Extension Cable Connection


⑧ Power block assy
Note) When removing the switching regulator from the main unit, start performing more than 30 seconds after the main power is turned off.
Extension cable : 8 pin (1-900-239-54)
⑦ Loosen the two screws.
Extension cable : 40 pin (1-900-239-53)
Extension cable : 64 pin (A-1501-146-A or A-1501-147-A)
⑥ I/O block assy
② Loosen the two screws.
④ Rear cover
⑤ Loosen the two screws.
① Loosen the two screws.
③ Eight screws (+PSW4 × 10)

2-2-2. H1 and UJ Boards Removal

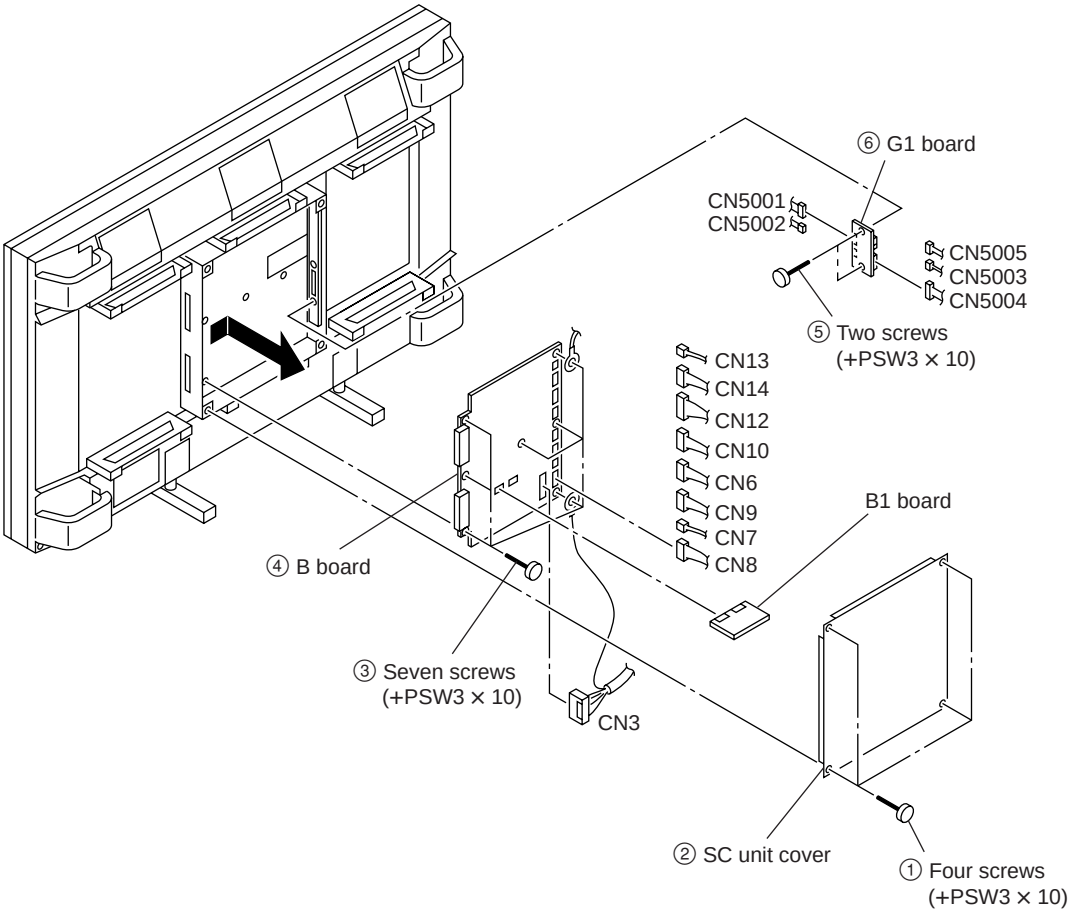


2-2-3. AF, G2, UA Boards and Switching Regulator (APS-132 M/136 M Board) Removal



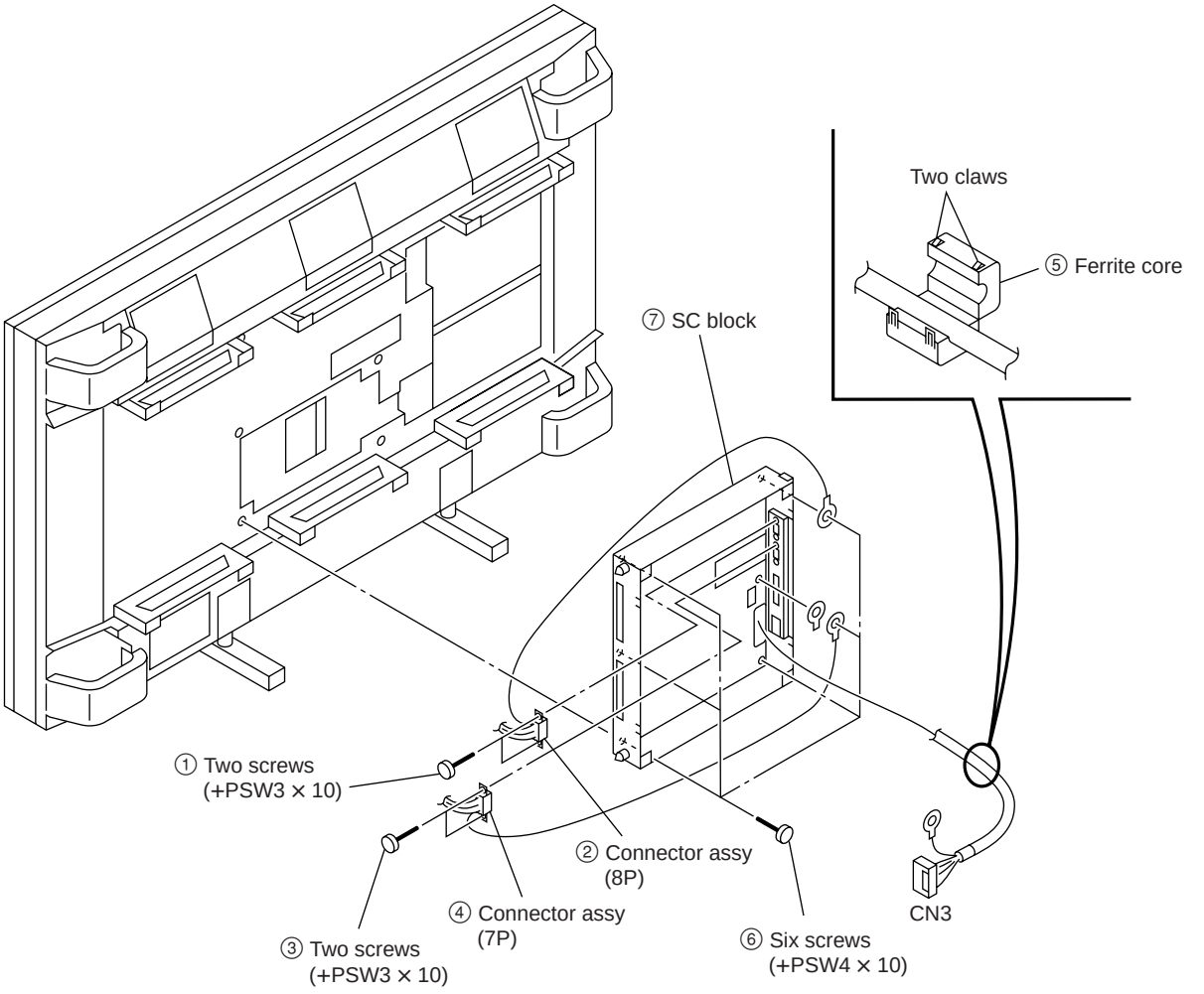
2-2-4. B and G1 Boards Removal

* Remove the Rear cover, I/O block assy and Power block assy. (Refer to 2-2-1.)



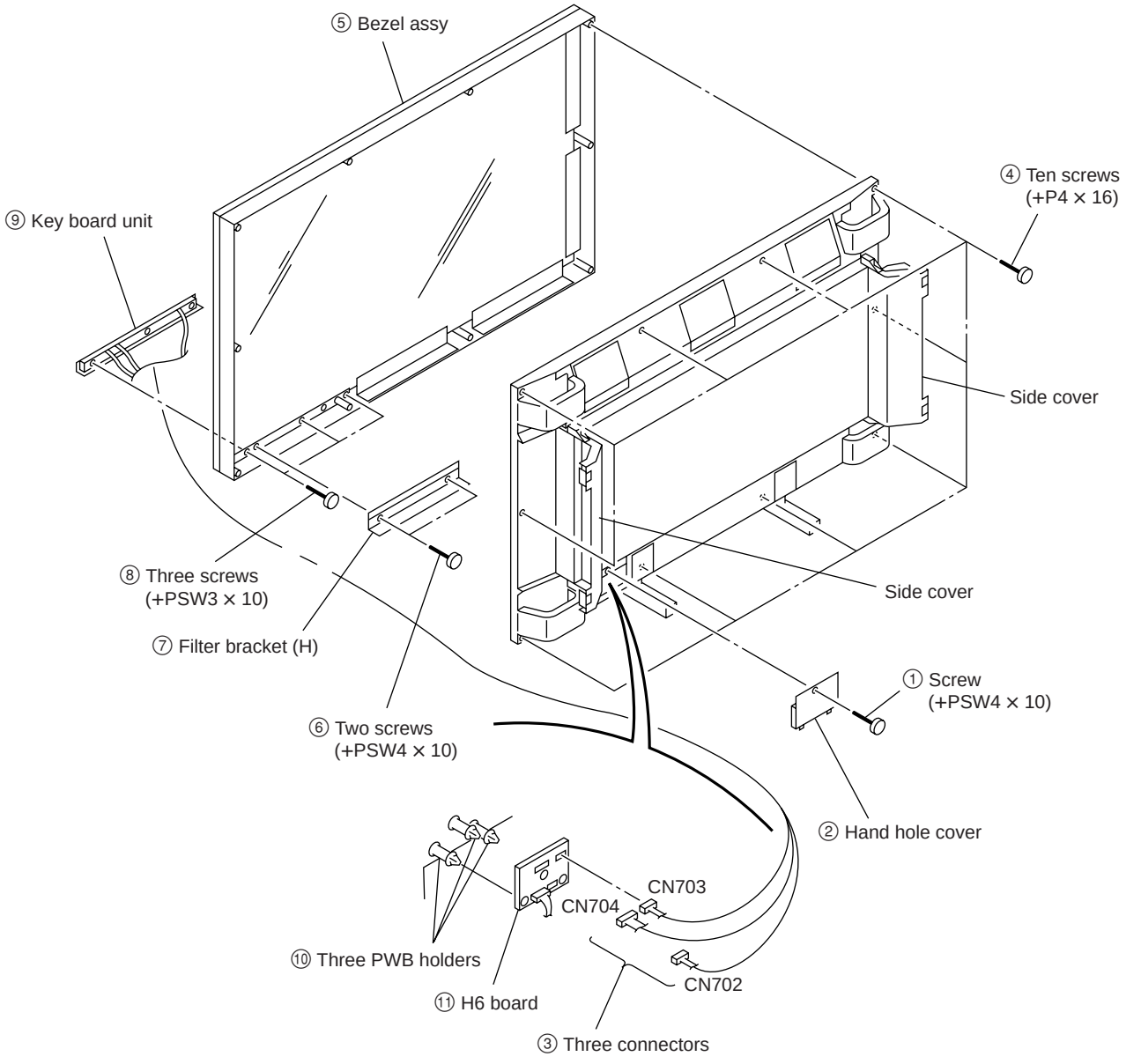
2-2-5. SC Block Removal

* Remove the B board. (Refer to 2-2-4.)



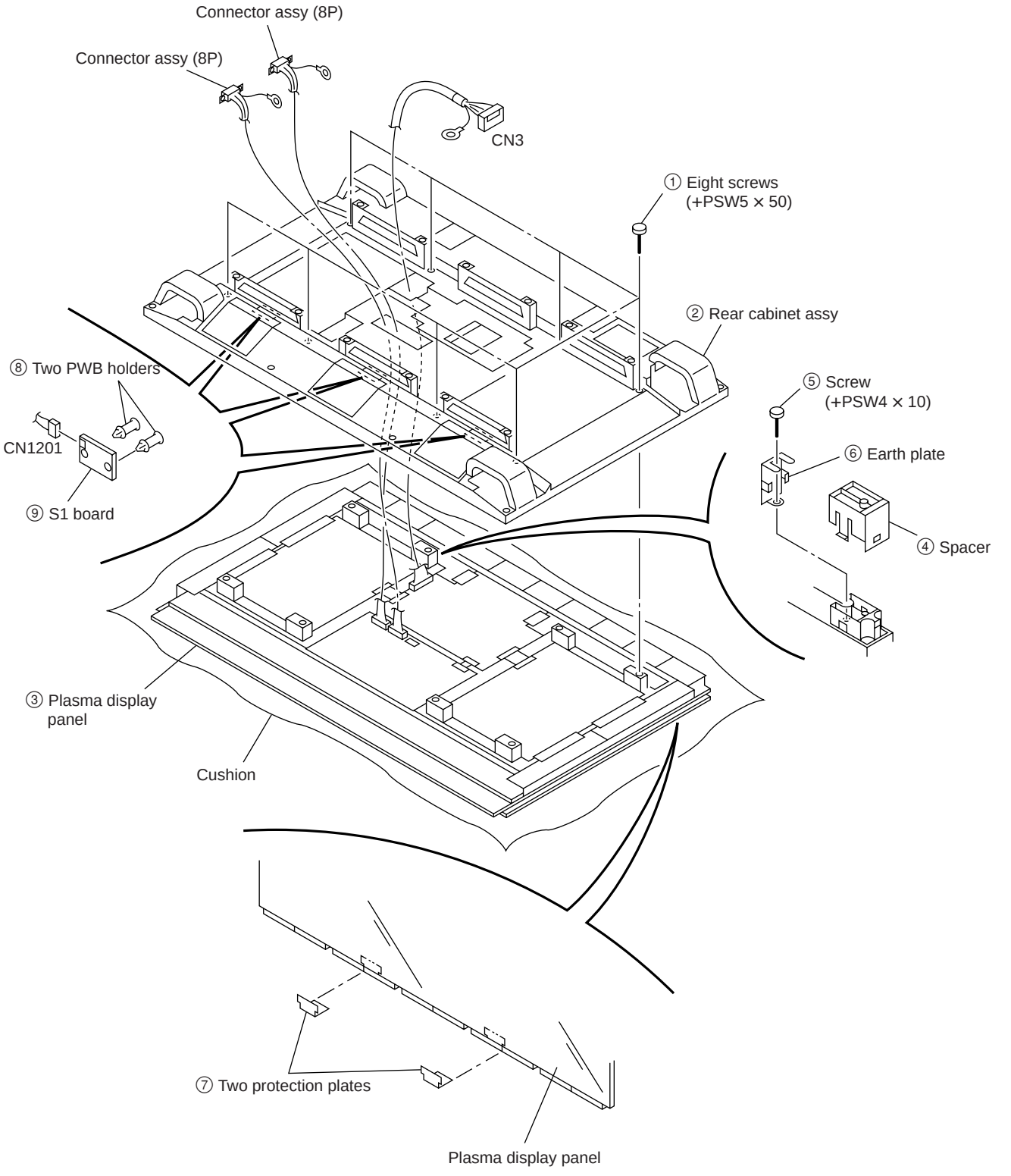
2-2-6. Bezel Assy and H6 Board Removal

* Open the side cover. (Refer to 2-2-1.)

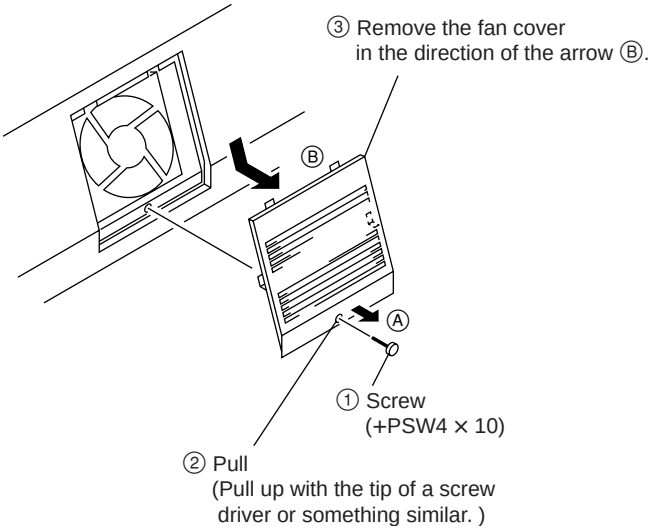


2-2-7. Plasma Display Panel and S1 Board Removal

* Remove the Bezel assy. (Refer to 2-2-6.)
* Remove the SC block. (Refer to 2-2-5.)



2-2-8. Fan Cover Removal



Section 3
Electrical Adjustments

3-1. Equipment Required

- Oscilloscope
  Tektronix 2465 or equivalent
  (band width : 350 MHz or more)
- VG (Programmable video signal generator)
  VG814 or equivalent
- Frequency counter
  Advantest TR5821AK or equivalent
- Digital voltmeter
  Advantest TR6845 or equivalent
- Potential transformer
- Regulated DC power supply
- Remote commander (RM-921)

Note : Perform the following adjustments at least 5 minutes after turning on the power.

3-2. Electrical Adjustments Using the Service Mode

The electrical adjustments can be performed using the remote commander RM-921 supplied with the PFM-500A3W/510A2W. The remote commander has the Service Mode. Select the Service Mode to perform the electrical adjustments as listed below.

● Service Menu

When you enter the Service Mode, the mode menu appears as shown below. The mode menu contains the three menus of MAIN MENU, SERVICE MENU and MANUAL MENU as shown. Select the SERVICE MENU to perform the electrical adjustments.

MODE SELECT

- MAIN MENU : This is the user's menu. Use the MAIN MENU when user adjustment items such as operation checks upon completion of adjustments, are going to be made.
- SERVICE MENU : This is the menu that is used for electrical adjustments. This section of this manual describes how to use the SERVICE MENU.
- MANUAL MENU : This menu is used in production factory. Do not make any attempts to use this menu and do not make any operations using this menu.

SERVICE MENU

EEPROM RESET	Initialization of EEPROM
WHITE BALANCE	Gain adjustment of digital gamma circuit
ADC CALIBRATION	Calibration of A/D converter
VIDEO PROCESSOR	Level adjustment of video processor circuit
SPECIAL FUNCTION	Setting the special functions
PRESET EDIT	Editing the preset signals
MAINTENANCE	Setting the data that are unique to the particular machine
STATUS/TEST	Internal status and function test

How to enter the Service Mode :
In the STAND-BY state, press the keys in the following order.
DISPLAY → 5 → VOL+ → POWER
How to exit the Service Mode :
Turn off the main power once and back on to enter the STAND-BY state or turn off the main power to exit the Service Mode.

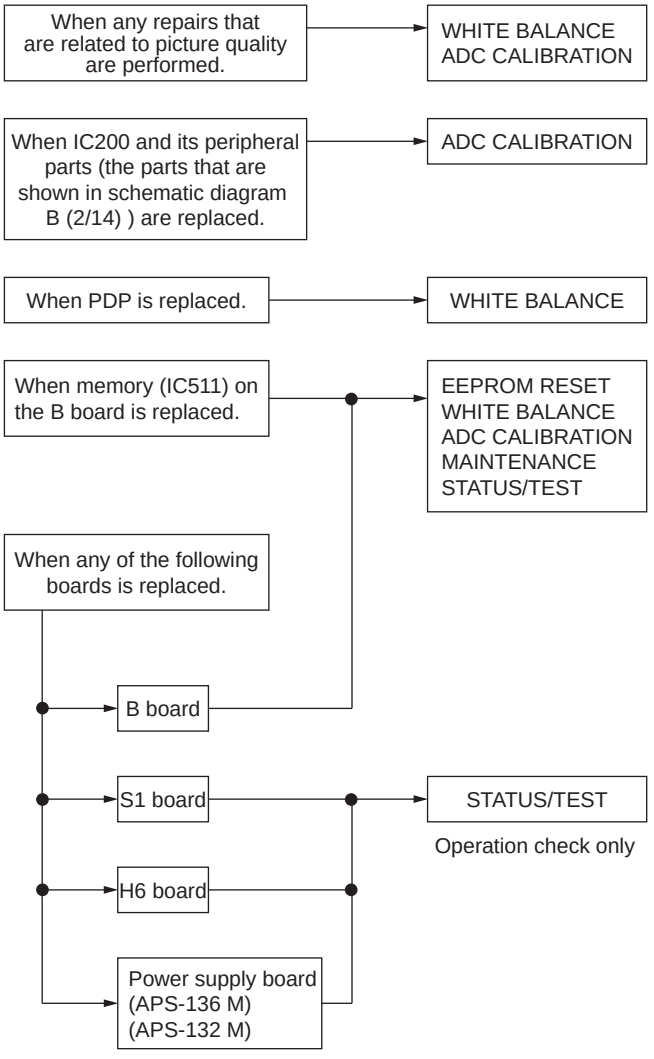
● Operation of remote commander in the Service Mode

The four keys of MENU, ENTER, SELECT+ and SELECT− are the basic operation keys in the same manner as in the user adjustment. The other keys can be operated in the same manner as in the user adjustment.

Note : In the previous models PFM-500A1W/A2S and PFM-510A1W, the electrical adjustments for service are performed using the numeric keys. However, in this model, the electrical adjustments for service are performed using the basic operation keys in the same manner as in the user adjustment.
When the main power is turned on while the machine is in the previous models, the OSD (on-screen display) appears automatically. However, in this mode, the OSD appears when the MENU key is pressed in the same manner as in the user menu.

● The electrical adjustments using the Service Mode become necessary in the following cases.

When any of the following repairs is performed, adjustment using the service mode becomes necessary.



SERVICE MENU

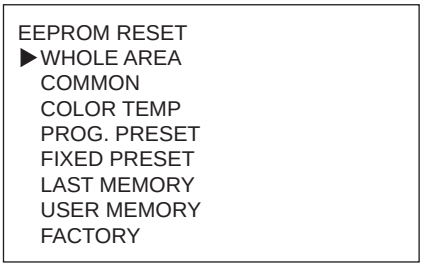
1. EEPROM RESET

EEPROM Configuration

Table 1 shows the configuration of EEPROM. The entire area or the respective areas of the EEPROM can be separately initialized.

Menu Structure

Select the desired area of EEPROM to be initialized using the following menu.



To initialize the desired area, firstly select the desired item from the EEPROM RESET menu. Change the selected item from CANCEL to EXECUTE. Then press ENTER.

a) WHOLE AREA
The entire area of the EEPROM is initialized. Initializing the entire area of the EEPROM has the same result as all menu items of COMMON, COLOR TEMP, PROG. PRESET, FIXED PRESET, LAST MEMORY, USER MEMORY and FACTORY are executed.

b) COMMON
Only the COMMON area of the EEPROM as shown in Table 1 is initialized.
When the COMMON area is initialized, the data that is unique to the particular machine and the common data (CONFIG MENU, REMOTE MENU) are initialized.

c) COLOR TEMP
Only the COLOR TEMP area of the EEPROM as shown in Table 1 is initialized.
When the COLOR TEMP area is initialized, the color temperature data in HIGH, LOW and the user setup data from 1 to 6 are initialized to 255. The users names are also initialized to “1” to “6”.

d) PROG. PRESET
Only the PROG. PRESET area of the EEPROM as shown in Table 1 is initialized.
When the PROG. PRESET area is initialized, the preset area (for 20 types) that is reserved as spare is initialized.

e) FIXED PRESET
Only the FIXED PRESET area of the EEPROM as shown in Table 1 is initialized.
When the FIXED PRESET area is initialized, the basic preset area is initialized to the built-in standard value that is stored in the system controller.

f) LAST MEMORY
Only the LAST MEMORY area of the EEPROM as shown in Table 1 is initialized.
When the LAST MEMORY area is initialized, only the last memory data of every signal that is adjusted by user is initialized.

g) USER MEMORY
Only the USER MEMORY area of the EEPROM as shown in Table 1 is initialized.
When the USER MEMORY area is initialized, all of the 20 types of adjustment data that is saved by the MEMORY function of the user menu are initialized to EMPTY.

h) FACTORY
Only the FACTORY area of the EEPROM as shown in Table 1 is initialized.
When the FACTORY area is initialized, all areas of the MEMORY except the areas that are listed below are initialized.

Items that are not initialized by the “FACTORY” RESET function.
- EEPROM ID CODE
- INDEX NUMBER
- MODEL NAME
- SERIAL NUMBER
- AUDO DIGITAL
- DIGITAL TYPE
- YUV2 TYPE
- AUTO PLL SETUP
- AUTO PLL PIXEL
- H/V SHIFT
- VIDEO SHARP SW
- AUTO FT CANCEL
- WATCH ERROR
- Y GAIN
- R-Y GAIN
- B-Y GAIN
- R CUTOFF
- B CUTOFF
- ADC R GAIN
- ADC G GAIN
- ADC B GAIN
- ADC R OFFSET
- ADC G OFFSET
- ADC B OFFSET

2. WHITE BALANCE

Menu Structure

Adjust the white balance of the desired color temperature by selecting the items of the WHITE BALANCE menu and by adjusting the R, G, B gain of the digital gamma circuit.

```
WHITE BALANCE
▶WINDOW      : OFF
  COLOR TEMP : HIGH
  RED GAIN   : 255
  GREEN GAIN : 255
  BLUE GAIN  : 255
```

a) WINDOW
The PFM-500A3W/510A2W has the built-in window signal for white balance adjustment. There are two sizes that are the large and small windows. Select the optimum size of window for white balance adjustment.
OFF : Window does not appear.
TYPE1 : Small window
TYPE2 : Large widow

Note : When white balance is going to be adjusted using an external signal, perform the A/D converter calibration (referring to the next paragraph 3) ADC CALIBRATION) before starting the white balance adjustment.

b) COLOR TEMP
To adjust the white balance, firstly select the desired color temperature from HIGH, LOW, 1, 2, 3, 4, 5 or 6 on the COLOR TEMP sub-menu. Color temperature of items 1 to 6 are the same as those of the user menu.

c) RED GAIN
Adjust the red gain of the selected color temperature.
The range of adjustment is from 010 to 255.

d) GREEN GAIN
Adjust the green gain of the selected color temperature.
The range of adjustment is from 010 to 255.

e) BLUE GAIN
Adjust the red blue of the selected color temperature.
The range of adjustment is from 010 to 255.

White Balance Adjustment

Refer to section “3-3. White Balance Adjustment”.

3. ADC CALIBRATION

Menu Structure

Calibrate the A/D converter (IC200) until non-uniformity between the R, G and B channels of the A/D converter is removed.

```
ADC CALIBRATION
▶AUTO        : OFF
  CAL MODE   : 128
  RED GAIN   : 128
  GREEN GAIN : 128
  BLUE GAIN  : 128
  RED BIAS   : 128
  GREEN BIAS : 128
  BLUE BIAS  : 128

  R : – – –  G : – – –  B : – – –
```

a) AUTO
The A/D converter is automatically calibrated.

Note : When sufficient adjustment accuracy cannot be obtained by the automatic calibration, perform basically the manual calibration using the following ADC CALIBRATION menu items.

b) CAL MODE
The A/D converter has the calibration mode as its operating mode as follows.
* The A/D converter has the R, G, B GAIN adjustments and the R, G, B BIAS adjustments. The GAIN adjustments of the A/D converter are used for CONTRAST adjustment in the machine. The R, G, B BIAS adjustments of the A/D converter are used for BRIGHTNESS adjustment in the machine.

CAL MODE - OFF : Standard display state
The R, G, B GAIN values and the R, G, B BIAS values are controlled by the CONTRAST/BRIGHT data of the user menu. The R, G, B GAIN values and the R, G, B BIAS values of this menu cannot be adjusted independently.
CAL MODE - OFF : Calibration mode
The R, G, B GAIN values and the R, G, B BIAS values of this menu can be adjusted independently. The R, G, B data that appear in the most-bottom part of the menu in cyan, change from the indication “– – –” to the indication of any digital output data of the A/D converter.

c) RED GAIN/GREEN GAIN/BLUE GAIN
The respective R, G, B GAIN values can be adjusted independently.
The range of adjustment is from 000 to 255.

d) RED BIAS/GREEN BIAS/BLUE BIAS
The respective R, G, B BIAS values can be adjusted independently.
The range of adjustment is from 000 to 255.

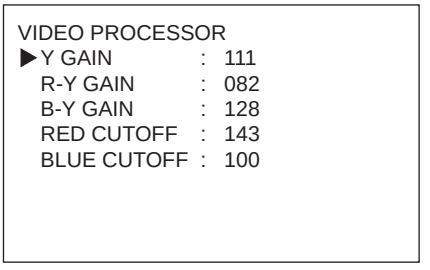
A/D Calibration Adjustment

Refer to section “3-4. A/D Calibration Adjustment”.

4. VIDEO PROCESSOR

Menu Structure

The following items of the video processor can be adjusted using this menu. However, all items of the video processor have the default values on which normal operations are performed. Therefore, the video processor normally needs no adjustment.



a) Y GAIN
The range of adjustment is from 000 to 255.
Default value : 111

b) R-Y GAIN
The range of adjustment is from 000 to 255.
Default value : 082

c) B-Y GAIN
The range of adjustment is from 000 to 255.
Default value : 128

d) RED CUTOFF
The range of adjustment is from 000 to 255.
Default value : 143

e) BLUE CUTOFF
The range of adjustment is from 000 to 255.
Default value : 100

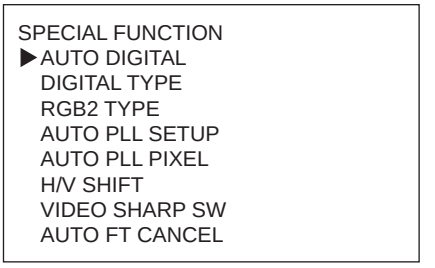
Video Processor Adjustment

Refer to section “3-5. Video Processor Adjustment”.
(Perform the service menu adjustment of the video processor only when the specifications cannot be satisfied by section “3-5. Video Processor Adjustment”.)

5. SPECIAL FUNCTION

Menu Structure

Various special functions as listed in the SPECIAL FUNCTION menu can be independently set as required.



a) AUTO DIGITAL
Sets enable/disable of automatic switching of the DIGITAL IN terminal.
The PFM-500A3W/510A2W is equipped with the DIGITAL IN terminal (CN2: Pins A21 to A32/B21 to B32) using the LVDS. The automatic switching of the DIGITAL IN terminal can be enabled/disabled as follows by the setup of the AUTO DIGITAL item of this menu.
ON : When the AUTO DIGITAL is set to ON, connect pin-A20 to GND to switch the DIGITAL IN terminal to the digital input. Disconnect pin-A20 to open to switch the DIGITAL IN terminal to the input state before the terminal is switched to digital.
OFF : When the AUTO DIGITAL is set to ON, the automatic switching of the DIGITAL IN terminal is disabled.
Set the AUTO DIGITAL item to the ON position normally.

b) DIGITAL TYPE
Selects either RGB signal or the YUV signal as the input signal to the DIGITAL IN terminal.
RGB : The RGB signal is selected as the input signal to the DIGITAL IN terminal.
YUV : The YUV signal is selected as the input signal to the DIGITAL IN terminal.
Set the DIGITAL TYPE item to the RGB position normally.

c) RGB2 TYPE
Selects either RGB signal or the YUV signal as the input signal to the RGB2 terminal.
RGB : The RGB signal is selected as the input signal to the RGB2 terminal.
YUV : The YUV signal is selected as the input signal to the RGB2 terminal.
Set the RGB2 item to the RGB position normally.

d) AUTO PLL SETUP

Sets enable/disable of automatic execution of the PIXEL ADJUST function.

ON : When the AUTO PLL SETUP is set to ON, the PIXEL ADJUST is automatically executed when the main power is turned on or when the input signal is switched. (Be noted that about 10 seconds are required to output the video signal after switching the input signal when this function is kept to the ON position.)

OFF : The automatic PIXEL ADJUST is executed only when AUTO item of the user menu PIXEL ADJUST is activated.

This function becomes valid only when the signal that enables the PIXEL ADJUST is inputted to the PFM-500A3W/510A2W.

Set the AUTO PLL SETUP item to the OFF position normally.

e) AUTO PLL PIXEL

Selects the functions that are automatically adjusted when PIXEL ADJUST is executed.

ON : Both the TOTAL H PIXEL and DOT PHASE are automatically adjusted.

OFF : Only the DOT PHASE is automatically adjusted.

In the case that the PFM-500A3W/510A2W is used under the environment where input signal contains much noise, there are cases that the PIXEL ADJUST mis-operations. Therefore, set the AUTO PLL PIXEL to the OFF position. In such a case, the TOTAL H PIXEL can be adjusted only manually.

This function becomes valid only when the signal that enables the PIXEL ADJUST is inputted to the PFM-500A3W/510A2W.

Set the AUTO PLL PIXEL item to the ON position normally.

f) H/V SHIFT

Selects the method to control the horizontal and vertical picture shift.

EDGE : When EDGE is selected, a picture is shifted by changing the starting position when reading data into memory. Using this function, the entire area including blanking of all pictures can be displayed by shifting. The variable range of shifting is 1 horizontal and vertical period respectively.

CAPT : When CAPT is selected, the picture that is already written into memory is shifted by a scan converter. Using this function, a picture can be shifted as much as ± 50 % of a picture. When a picture is partly lacked at an end of a picture, the lacked portion of a picture cannot be displayed.

Set the H/V SHIFT item to the EDGE position normally.

g) VIDEO SHARP SW

Sets analog aperture ON or OFF.

The two methods are used for the aperture correction of the video signals (NTSC/PAL/SECAM/NTSC4.43/PAL60 and YUV signal having horizontal frequency of 15 kHz). These two methods are the scaling filter and the analog aperture of the scan converter.

ON : Both the scaling filter and the analog aperture of the scan converter are used for aperture correction.

OFF : Only the scaling of the scan converter is used for aperture correction.

This function becomes valid only when the signal (NTSC/PAL/SECAM/NTSC4.43/PAL60 and YUV signal having horizontal frequency of 15 kHz) is inputted to the PFM-500A3W/510A2W.

Set the VIDEO SHARP SW item to the ON position normally.

h) AUTO FT CANCEL

Sets the FT (field tearing) cancel circuit ON or OFF.

The PFM-500A3W/510A2W has the FT (field tearing) prevention circuit caused by the overrun of memory while it is displaying the moving picture (video and DTV). However, there can be cases that noise appears on screen when the FT (field tearing) prevention is being executed.

ON : The FT (field tearing) is cancelled in every picture size and in every shift conditions as long as the PFM-500A3W/510A2W is receiving the moving picture. When this item is set to ON, noise may appear only once after the size/shift is adjusted. (Noise does not last long but appears only once when the size/shift adjustment is complete.)

OFF : The FT (field tearing) cancel circuit is disabled. When OFF is selected, there can be a case that the FT (field tearing) appears on screen depending on the adjustment conditions of picture size/shift. However, the noise due to operation of the processing circuit does not occur.

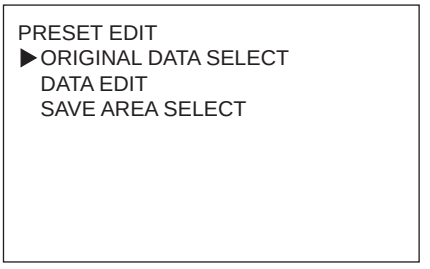
Set the AUTO FT CANCEL item to the ON position normally.

6. PRESET EDIT

Preset Data Configuration

Memory map of the preset data area is shown in Table 1 (PROG. PRESET/FIXED PRESET). The areas from 1 to 20 are assigned to store the additional signal. The areas from 21 to 74 are assigned to store the internal signal.

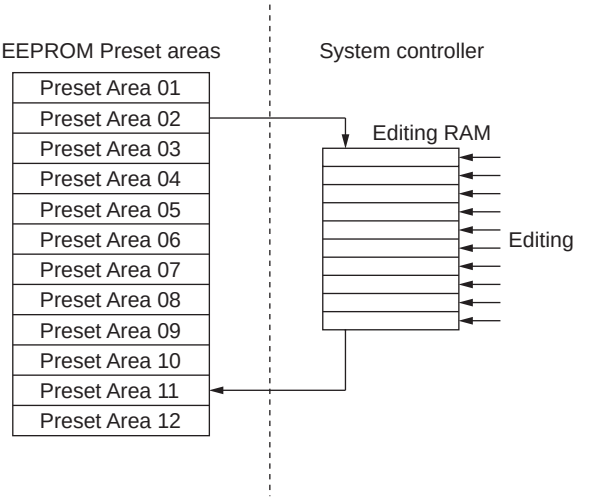
Menu Structure



How To Edit The Preset Data

As shown in the illustration, the system controller contains the memory area (i.e., Editing RAM) that is assigned only for data editing. The source data that is used for editing must be firstly copied to the Editing RAM. Edit then the copied data as desired. Finally save the result of editing in the specified preset area of the EEPROM.

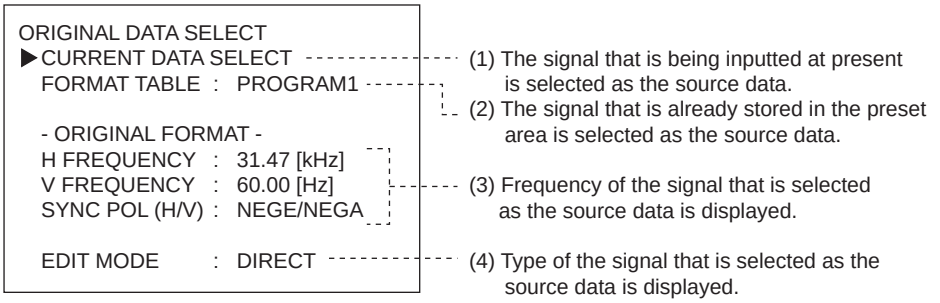
(The illustration shows an example that the data in the preset area No. 02 is once copied to the Editing RAM where data is edited. The edited data is sent back to the preset area No. 11 where the edited data is saved.)



a) ORIGINAL DATA SELECT

Menu Structure

Select the source data that is used for editing. Then the selected source data is copied to the Editing RAM.


ORIGINAL DATA SELECT
▶CURRENT DATA SELECT
FORMAT TABLE : PROGRAM1
- ORIGINAL FORMAT -
H FREQUENCY : 31.47 [kHz]
V FREQUENCY : 60.00 [Hz]
SYNC POL (H/V) : NEGE/NEGA
EDIT MODE : DIRECT
(1) The signal that is being inputted at present is selected as the source data.
(2) The signal that is already stored in the preset area is selected as the source data.
(3) Frequency of the signal that is selected as the source data is displayed.
(4) Type of the signal that is selected as the source data is displayed.

(1) CURRENT DATA SELECT
When an editing is performed using the signal that is being inputted at present is selected as the source data, move the cursor to this item and press ENTER. The selected data is copied to the Editing RAM.

(2) FORMAT TABLE : PROGRAM 1
When an editing is performed using the signal that is already stored in the preset area is selected as the source data, move the cursor to this item and press ENTER. Select the desired area from Table 1 by pressing the +/− keys. The selected data is copied to the Editing RAM.

(3) - ORIGINAL FORMAT -
Frequency of the signal that is selected as the source data in step (1) or (2) is displayed.
Use the frequency data as the fundamental information when selecting a source data.

(4) EDIT MODE
When the signal that is being inputted at present is selected as the source data, the message DIRECT appears. When the signal that is already stored in the preset area is selected as the source data, the message TABLE appears.

Note : The editing items that can be editing here are different in the DIRECT mode and the TABLE mode. Refer to the next sub-section “b) DATA EDIT” for the editing items.

< When DIRECT mode is used for editing >
… The DIRECT mode is used when editing is performed while watching the picture on screen in the case that the specifications of the signal are not known. …
When DIRECT mode is selected, select the desired adjustment item referring to the next sub-section “b) DATA EDIT” by pressing the +/− keys. Press the ENTER key. Then the result of data adjustment is reflected on the display screen. (Pressing the MENU key returns to the previous menu display.)
However, the three adjustment items H FREQUENCY, V FREQUENCY and SYNC POL cannot be changed by the menu operation.

< When TABLE mode is used for editing >
… The TABLE mode is used when the specifications of the signal to edit are already known. …
All adjustment items adjusted by the menu but result of adjustment is not reflected on the actual picture. Data can be edited only.

b) DATA EDIT

Menu Structure

The following items of the source data that is copied to the Editing RAM can be modified as described below.

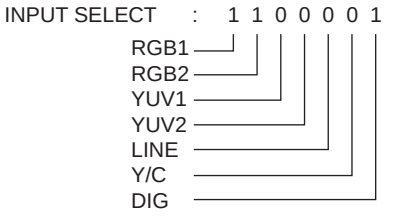
DATA EDIT			
▶INPUT SELECT	:	1100000	(1) Acceptable type of input signal
H FREQUENCY	:	31.47 [kHz]	(2) Horizontal frequency
V FREQUENCY	:	60.00 [Hz]	(3) Vertical frequency
SYNC POL (H/V)	:	NEGA/NEGA	(4) Sync signal polarity
TOTAL H PIXEL	:	800	(5) Total number of horizontal dots
LEFT EDGE	:	140	(6) Horizontal dot position to start reading
H RESOLUTION	:	640	(7) Horizontal resolution (Number of dots)
TOP EDGE	:	35	(8) Vertical dot position to start reading
V RESOLUTION	:	480	(9) Vertical resolution (Number of dots)
DOT PHASE	:	128	(10) Dot phase
CP PLACEMENT	:	005	(11) Clamp pulse width (Number of dots)
CP DURATION	:	016	(12) Clamp pulse position (Number of dots)
INTERLACE MODE	:	OFF	(13) Interlace setting
FILED MODE	:	OFF	(14) In-field processing setting
FRAMELOCK MODE	:	OFF	(15) Vertical sync setting
MATRIX SELECT	:	ITU709	(16) Color difference matrix setting
PICTURE AGC	:	ON	(17) Automatic brightness adjustment setting
ASPECT	:	4 × 3	(18) Aspect ratio setting
ZOOM	:	× 1	(19) Zoom setting
APERTURE INIT	:	MID	(20) Aperture initial value setting
APERTURE HIGH	:	000	(21) Aperture data setting
APERTURE MID	:	002	(22) Aperture data setting
APERTURE LOW	:	004	(23) Aperture data setting
AUTO PLL	:	ON	(24) Automatic PIXEL ADJUST setting
SYNC WIDTH (µs)	:	003.81	(25) Horizontal sync signal width

Note : A maximum of 8 lines of the above menu can be displayed on screen. The other menu items can be displayed by scrolling the display by moving the cursor up or down.

(1) INPUT SELECT

The input signals that are acceptable to the PFM-500A3W/510A2W are set.

This item consists of 8 bits. Each bit corresponds to each type of input signal. Only the input channel to which "1" is set, can be received by the PFM-500A3W/510A2W.



Note : Regarding the LINE and Y/C input channels, these signals having horizontal frequency of 15 kHz can be inputted. Because these input signals pass through the double-speed processing circuit in the PFM-500A3W/510A2W circuit configuration, do not use the LINE and Y/C input channels.

(2) H FREQUENCY

The horizontal frequency is set.

Note: This menu item cannot be modified in the DIRECT mode because the DIRECT mode can edit the signal that is being inputted at present.

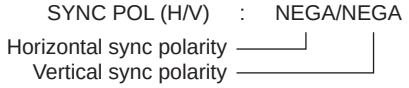
(3) V FREQUENCY

The vertical frequency is set.

Note : This menu item cannot be modified in the DIRECT mode because the DIRECT mode can edit the signal that is being inputted at present.

(4) SYNC POL (H/V)

Polarity of sync signal is set.



To set the polarity, select as follows:

Negative polarity : NEGA

Positive polarity : POSI

SOG : ---

Note : This menu item cannot be modified in the DIRECT mode because the DIRECT mode can edit the signal that is being inputted at present.

(5) TOTAL H PIXEL

The total number of dots in a horizontal period is set.

The number of dots that is set here becomes the initial value of the user menu "TOTAL H PIXEL".

Note : Set the total number of dots to satisfy the following conditions.
TOTAL H PIXEL ≧ [LEFT EDGE + H RESOLUTION]

(6) LEFT EDGE

The horizontal sync width (in dots) + horizontal back porch width (in dots) are set.

(7) H RESOLUTION

Horizontal resolution power is set.

Note : When 1280 or more is set to the horizontal resolution, picture may not be displayed normally on screen. When a signal that has the higher resolution than the SXGA signal, is going to be preset, reduce the number of horizontal resolution by skipping or any other means down to 1280 or less.

(8) TOP EDGE

The vertical sync width (in lines) + vertical back porch width (in lines) are set.

Note : Set the TOP EDGE value to satisfy the following conditions.
[TOP EDGE + V RESOLUTION] ≦ [horizontal frequency + vertical frequency]

(9) V RESOLUTION

The vertical resolution is set.

Note : Set the V RESOLUTION value to satisfy the following conditions.
[TOP EDGE + V RESOLUTION] ≦ [horizontal frequency + vertical frequency]

(10)DOT PHASE

Pulse phase of the horizontal sampling frequency is set.

The pulse phase that is set here becomes the initial value of DOT PHASE of the user menu.

The pulse phase can be set in the range of 000 to 255.

(11)CP PLACEMENT

Clamp pulse position is set.

The clamp pulse position is set starting from the trailing edge of horizontal sync signal (when data is 000). Increasing this value moves the clamp pulse in the direction toward the picture area.

The clamp pulse generating position "Tcp" is given by the following equation starting from the trailing edge of horizontal sync signal.

Tcp = CP PLACEMENT / [horizontal sync frequency × TOTAL H PIXEL] (in seconds)

(12)CP DURATION

Clamp pulse width is set.

The clamp pulse width is set starting from the position that is determined by CP PLACEMENT. Increasing this value widens the clamp pulse width in the direction toward the picture area.

The clamp pulse width "Wcp" is given by the following.

Wcp = CP DURATION / [horizontal sync frequency × TOTAL H PIXEL] (in seconds)

(13)INTERLACE MODE

Whether the input signal is interlaced or not is set.

ON : When the input signal is the interlaced signal.

OFF : When the input signal is not the interlaced signal.

(14)FIELD MODE

Whether the interlaced signal is processed within a field or within a frame, is set.

ON : When the input interlaced signal is processed within a field.

OFF : When the interlaced signal is processed within a frame.

Select the ON position when a signal has a low co-relationship between the two fields within a frame such as moving picture.

(15)FRAMELOCK MODE

Whether the PDP display picture is synchronized with the input signal to scan converter or not, is set.

ON : The PDP display picture is synchronized with the input signal.

OFF : The PDP display picture is asynchronous with the input signal.

When moving picture (animation) is going be displayed, select the ON position.

Note : This item can be set to ON as long as the vertical frequency of the input signal is in the range of 50 to 60 Hz.

(16)MATRIX SELECT

The color difference matrix when the YUV signal is being input, is set.

(17)PICTURE AGC

Whether the PICTURE AGC is turned ON or OFF is set.

Result of this setting becomes the initial value of the user menu PICTURE AGC.

This function becomes valid only when the COMPOSITE/YC/YUV signal is being received.

(18)ASPECT

The desired aspect ratio is selected from the aspect ratios of 4 × 3 or 16 × 9 or W ZOOM. Result of this setting becomes the initial value of the user menu ASPECT.

Note : The W ZOOM can not be selected when the ZOOM is in the range of × 2 to × 4.

(19)ZOOM

The desired zoom ratio is selected from the zoom ratios of × 1 or × 2 or × 3 or × 4. Result of this setting becomes the initial value of the user menu ZOOM.

Note : Any zoom ratios other than × 1 cannot be selected when the ASPECT is W ZOOM.

(20)APERTURE INIT

The desired aperture is selected from HIGH or MID or LOW. Result of this setting becomes the initial value of the user menu APERTURE.

(21)APERTURE HIGH

The scaling filter value when selecting HIGH of the APERTURE, is set. The scaling filter value can be set in the range of 000 to 011. (Refer to the Supplement to APERTURE in the following paragraph.)

(22)APERTURE MID

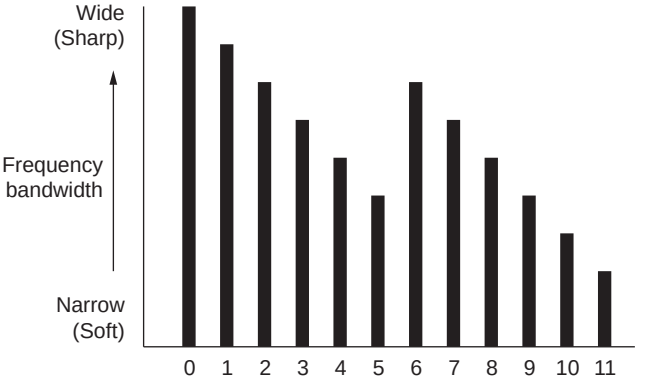
The scaling filter value when selecting MID of the APERTURE, is set. The scaling filter value can be set in the range of 000 to 011. (Refer to the Supplement to APERTURE in the following paragraph.)

(23)APERTURE LOW

The scaling filter value when selecting LOW of the APERTURE, is set. The scaling filter value can be set in the range of 000 to 011. (Refer to the Supplement to APERTURE in the following paragraph.)

< Supplement to APERTURE >

The PFM-500A3W/510A2W has the 12 different types of built-in scaling filter. Select an appropriate filter using the following filter characteristics chart as a guideline.



(24) AUTO PLL

Whether the user menu adjustment PIXEL ADJUST is enabled or disabled, is set.

ON : The user menu adjustment PIXEL ADJUST is enabled.

OFF : All items of the adjustment PIXEL ADJUST show the indication [−−−]. The user menu adjustment PIXEL ADJUST is disabled.

Select the OFF position when the setup of the TOTAL H and that of RESOLUTION do not agree with specifications of the actual input signal.

(25) SYND WIDTH (µs)

Sync pulse width of the horizontal sync signal is set in units of microseconds [µseconds].

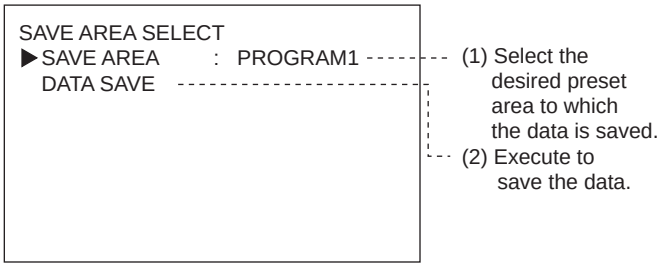
This menu item is prepared for the purpose of stabilization of the sync signal separation circuit. Therefore, accurate setting is not necessarily needed.

If the sync signal width is not known, select "Not set" (source data).

c) SAVE AREA SELECT

Menu Structure

The data that is copied in the Editing RAM, is saved in the preset area.


SAVE AREA SELECT
▶SAVE AREA : PROGRAM1
DATA SAVE
(1) Select the desired preset area to which the data is saved.
(2) Execute to save the data.

(1) SAVE AREA SELECT

Select the desired preset area from Table 1 to which the content of the Editing RAM is saved.

(2) DATA SAVE

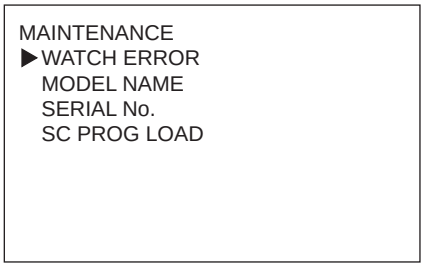
Execute to save the data to the preset area that is selected by the SAVE AREA SELECT. Change the item from CANCEL to EXECUTE. Then press ENTER.

Note : Judgment whether the input signal agrees with the preset data or not, is performed using the horizontal sync frequency, vertical sync frequency and polarity of the sync signals. If the same sync signal already exists in the preset area (Table 1), the specification that has the small preset No., has a higher priority.

7. MAINTENANCE

Menu Structure

The data that is unique to the particular machine of the PFM-500A3W/510A2W and the scan converter can be upgraded using this menu.



a) WATCH ERROR

Errors of the built-in watch IC can be corrected.

To correct the error, enter the measurement value of the frequency counter that is connected.

Range of adjustment is from 32761.85 Hz to 32774.25 Hz.

b) MODEL NAME

Model name can be set.

c) SERIAL No.

Serial number can be set.

d) SC PROG LOAD

The built-in program of the scan converter can be modified using this menu item.

Change the item from CANCEL to EXECUTE. Then press ENTER.

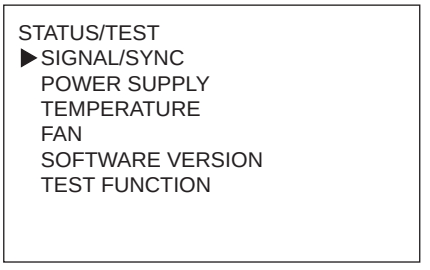
Watch Error Adjustment

Refer to section "3-6. Watch Error Adjustment".

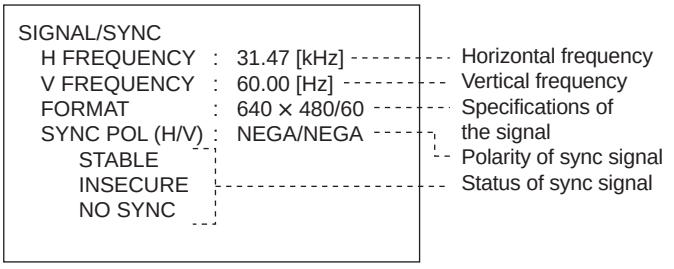
8. STATUS/TEST

Menu Structure

The internal status of the PFM-500A3W/510A2W can be checked and its functions can be checked using the STATUS/TEST menu.



a) SIGNAL/SYNC

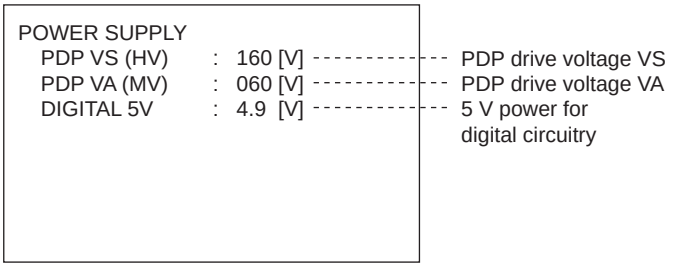


Information regarding the sync signal of the input signal is displayed.

Horizontal frequency :
Horizontal frequency of the input signal is displayed in four digits.
Vertical frequency :
Vertical frequency of the input signal is displayed in four digits.
Specifications of the signal :
Names of presets of the preset areas (Table 1) corresponding to input signal are displayed.
Polarity of sync signal :
Polarity of sync signal is displayed.
Status of sync signal :
Status of sync signal is displayed in cyan.

STABLE : Sync signal is stable.
INSECURE : Sync signal is unstable.
NO SYNC : Sync signal does not exist.

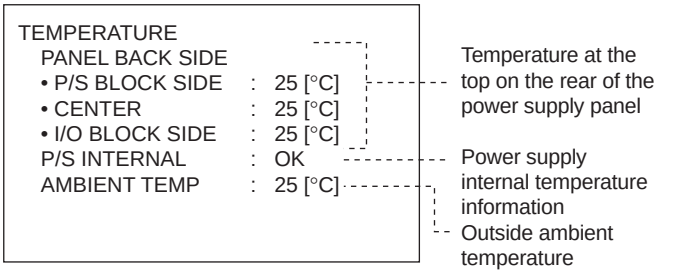
b) POWER SUPPLY


POWER SUPPLY
PDP VS (HV) : 160 [V]
PDP VA (MV) : 060 [V]
DIGITAL 5V : 4.9 [V]
PDP drive voltage VS
PDP drive voltage VA
5 V power for digital circuitry

The main DC power voltages of the PFM-500A3W/510A2W are displayed.

PDP drive voltage VS :
High voltage power to PDP is displayed.
PDP drive voltage VA :
Medium voltage power to PDP is displayed.
5 V power for digital circuitry :
Internal 5 V power is displayed.

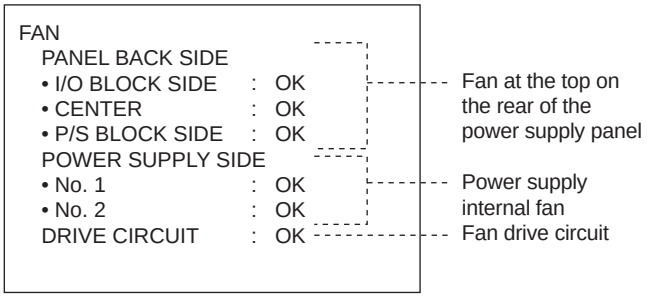
c) TEMPERATURE


TEMPERATURE
PANEL BACK SIDE
• P/S BLOCK SIDE : 25 [°C]
• CENTER : 25 [°C]
• I/O BLOCK SIDE : 25 [°C]
P/S INTERNAL : OK
AMBIENT TEMP : 25 [°C]
Temperature at the top on the rear of the power supply panel
Power supply internal temperature information
Outside ambient temperature

Internal temperature information of PFM-500A3W/510A2W is displayed.

Temperature at the top on the
rear of the power supply panel :
Temperatures under the respective fans on the rear of the power supply panel are displayed as follows.
P/S BLOCK SIDE :
Temperature of the side of the power supply block.
CENTER : Temperature at the center.
I/O BLOCK SIDE :
Temperature of the I/O terminal block.
Power supply internal temperature information :
Temperature status inside the power supply block is displayed. The message OK appears when temperature is normal. The message NG appears when temperature is abnormal.
Outside ambient temperature :
Temperature in the lower part (H6 board block) on the rear of the PFM-500A3W/510A2W is displayed.

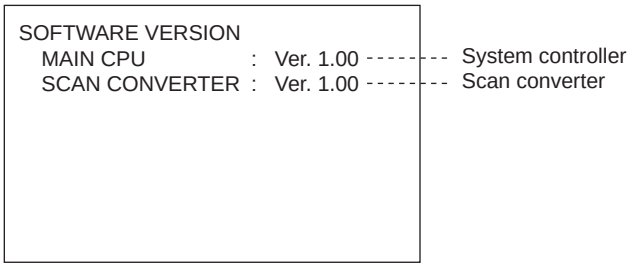
d) FAN


FAN
PANEL BACK SIDE
• I/O BLOCK SIDE : OK
• CENTER : OK
• P/S BLOCK SIDE : OK
POWER SUPPLY SIDE
• No. 1 : OK
• No. 2 : OK
DRIVE CIRCUIT : OK
Fan at the top on the rear of the power supply panel
Power supply internal fan
Fan drive circuit

The cooling fan operational information inside the PFM-500A3W/510A2W is displayed. The message OK appears when fan is normal. The message NG appears when fan is abnormal.

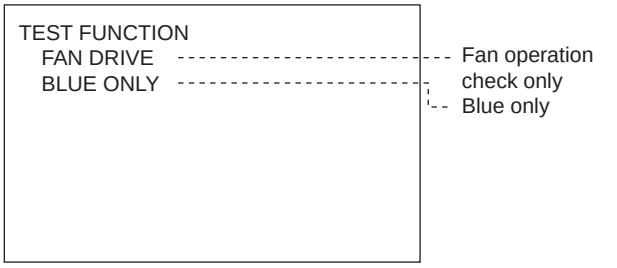
Fan at the top on the rear of the power supply panel :
Operating states of the respective fans on the rear of the power supply panel are displayed as follows.
P/S BLOCK SIDE :
Fan on the side of the power supply block.
CENTER : Fan in the center.
I/O BLOCK SIDE : Fan in the I/O terminal block.
Power supply internal fan :
Operating state of the fan inside the power supply block is displayed.
Fan drive circuit :
Operating state of the fan control circuit is displayed. The message OK appears when fan is normal. The message NG appears when fan is abnormal.

e) SOFTWARE VERSION



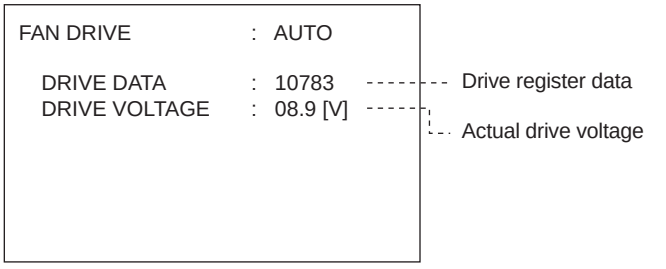
Version of each software is displayed.
System controller :
Version of the main microprocessor is displayed.
Scan converter :
Version of the scan converter (IC207) is displayed.

f) TEST FUNCTION



This is the test function.

• Fan operation check only



When the FAN DRIVE is changed from AUTO to MANUAL, and ENTER is pressed, the DRIVE DATA indication changes to cyan. In this setup, the drive register value can be manually modified. When the drive register value is changed, the pulse width of the PWM signal in the fan voltage control PWM circuit is changed accordingly.
Fans can be checked whether they operate normally or not by comparing the register value and the actual drive voltage, and by comparing the actual drive voltage and the actual operations of the fans.
Variable range of the drive register value :
00000 to 16383

• Blue only
When Blue only is selected, all of the R, G and B colors become the blue data.

Table 1. EEPROM Configuration

Area	Data Configuration	Standard Value
COMMON	EEPROM ID CODE	Pass code for model ID
	POWER	OFF
	VOLUME	30
	DISPLAY	ON
	CLOSED CAPTION	OFF
	COLOR SYSTEM	AUTO
	SCREEN FILL	CENTER
	POWER SAVING	OFF
	ON/OFF TIMER	OFF
	POWER ON TIME	0
	POWER OFF TIME	0
	PICTURE INVERSION	OFF
	POWER OFF(INVERT)	NO
	PICTURE ORBITING	OFF
	ORBIT RANGE	5dot
	ORBIT CYCLE	10sec
	LANGUAGE	ENGLISH
	INDEX NUMBER	1
	REMOTE MODE	TV
	REMOTE ONLY	OFF
	MODEL NAME	PFM-510A2W/PFM-500A3W
	INPUT CHANNEL	RGB1
	OPERATION TIME	000000H
	SERIAL NUMBER	2000001
	AUTO DIGITAL	ON
	DIGITAL TYPE	RGB
	YUV2 TYPE	RGB
	AUTO PLL SETUP	OFF
	AUTO PLL PIXEL	ON
	H/V SHIFT	EDGE
	VIDEO SHARP SW	ON
	AUTO FT CANCEL	ON
	WATCH ERROR	32768.05
	Y GAIN	111
	R-Y GAIN	82
	B-Y GAIN	128
	R CUTOFF	148
	B CUTOFF	100
	ADC R GAIN	128
	ADC G GAIN	128
	ADC B GAIN	128
	ADC R OFFSET	128
	ADC G OFFSET	128
	ADC B OFFSET	128

Area	Data Configuration	Standard Value
COLOR TEMP	RED GAIN (HIGH)	255
	GREEN GAIN (HIGH)	255
	BLUE GAIN (HIGH)	255
	RED GAIN (LOW)	255
	GREEN GAIN (LOW)	255
	BLUE GAIN (LOW)	255
	RED GAIN (USER1)	255
	GREEN GAIN (USER1)	255
	BLUE GAIN (USER1)	255
	RED GAIN (USER2)	255
	GREEN GAIN (USER2)	255
	BLUE GAIN (USER2)	255
	RED GAIN (USER3)	255
	GREEN GAIN (USER3)	255
	BLUE GAIN (USER3)	255
	RED GAIN (USER4)	255
	GREEN GAIN (USER4)	255
	BLUE GAIN (USER4)	255
	RED GAIN (USER5)	255
	GREEN GAIN (USER5)	255
	BLUE GAIN (USER5)	255
	RED GAIN (USER6)	255
	GREEN GAIN (USER6)	255
	BLUE GAIN (USER6)	255
	NAME (HIGH)	HIGH
	NAME (LOW)	LOW
	NAME (USER1)	1
	NAME (USER2)	2
	NAME (USER3)	3
	NAME (USER4)	4
	NAME (USER5)	5
	NAME (USER6)	6

Area	Data Configuration	Standard Value
PROG. PRESET	PRESET AREA 1 (PROGRAM 1)	EMPTY
	PRESET AREA 2 (PROGRAM 2)	EMPTY
	PRESET AREA 3 (PROGRAM 3)	EMPTY
	PRESET AREA 4 (PROGRAM 4)	EMPTY
	PRESET AREA 5 (PROGRAM 5)	EMPTY
	PRESET AREA 6 (PROGRAM 6)	EMPTY
	PRESET AREA 7 (PROGRAM 7)	EMPTY
	PRESET AREA 8 (PROGRAM 8)	EMPTY
	PRESET AREA 9 (PROGRAM 9)	EMPTY
	PRESET AREA10 (PROGRAM10)	EMPTY
	PRESET AREA11 (PROGRAM11)	EMPTY
	PRESET AREA12 (PROGRAM12)	EMPTY
	PRESET AREA13 (PROGRAM13)	EMPTY
	PRESET AREA14 (PROGRAM14)	EMPTY
	PRESET AREA15 (PROGRAM15)	EMPTY
	PRESET AREA16 (PROGRAM16)	EMPTY
	PRESET AREA17 (PROGRAM17)	EMPTY
	PRESET AREA18 (PROGRAM18)	EMPTY
	PRESET AREA19 (PROGRAM19)	EMPTY
	PRESET AREA20 (PROGRAM20)	EMPTY
FIXED PRESET	PRESET AREA21	640 × 350@70
	PRESET AREA22	640 × 350@85
	PRESET AREA23	640 × 400@85
	PRESET AREA24	640 × 480@60
	PRESET AREA25	MAC13
	PRESET AREA26	640 × 480@72
	PRESET AREA27	640 × 480@75
	PRESET AREA28	640 × 480@85
	PRESET AREA29	720 × 400@70
	PRESET AREA30	720 × 400@85
	PRESET AREA31	800 × 600@56
	PRESET AREA32	800 × 600@60
	PRESET AREA33	800 × 600@72
	PRESET AREA34	800 × 600@75
	PRESET AREA35	800 × 600@85
	PRESET AREA36	MAC16
	PRESET AREA37	1024 × 768@43
	PRESET AREA38	1024 × 768@60
	PRESET AREA39	1024 × 768@70
	PRESET AREA40	1024 × 768@75
	PRESET AREA41	1024 × 768@85
	PRESET AREA42	1152 × 864@75
	PRESET AREA43	MAC21
	PRESET AREA44	1280 × 960@60
	PRESET AREA45	1280 × 960@85
	PRESET AREA46	1280 × 1024@60
	PRESET AREA47	1280 × 1024@75
	PRESET AREA48	1280 × 1024@85
	PRESET AREA49	1600 × 1200@60
	PRESET AREA50	625 × 50I
	PRESET AREA51	525 × 60I
	PRESET AREA52	575 × 50P
	PRESET AREA53	480 × 60P
	PRESET AREA54	1080 × 48I
	PRESET AREA55	1080 × 50I
	PRESET AREA56	1080 × 60I
	PRESET AREA57	1035 × 60I
	PRESET AREA58	720 × 50P
	PRESET AREA59	720 × 60P
	PRESET AREA60	1024 × 1024@60
	PRESET AREA61	852 × 480@60
	PRESET AREA62	1280 × 768@56
	PRESET AREA63	Line Doubler 625 × 50I (YUV)
	PRESET AREA64	Line Doubler 525 × 60I (YUV)
	PRESET AREA65	Line Doubler NTSC (LINE)
	PRESET AREA66	Line Doubler PAL (LINE)
	PRESET AREA67	Line Doubler SECAM (LINE)
	PRESET AREA68	Line Doubler 443NT (LINE)
	PRESET AREA69	Line Doubler PAL60 (LINE)
	PRESET AREA70	Line Doubler NTSC (Y/C)
	PRESET AREA71	Line Doubler PAL (Y/C)
	PRESET AREA72	Line Doubler SECAM (Y/C)
	PRESET AREA73	Line Doubler 443NT (Y/C)
	PRESET AREA74	Line Doubler PAL60 (Y/C)

Area	Data Configuration	Standard Value
LAST	PRESET AREA 1 (PROGRAM 1)	EMPTY
MEMORY	PRESET AREA 2 (PROGRAM 2)	EMPTY
	PRESET AREA 3 (PROGRAM 3)	EMPTY
	PRESET AREA 4 (PROGRAM 4)	EMPTY
	PRESET AREA 5 (PROGRAM 5)	EMPTY
	PRESET AREA 6 (PROGRAM 6)	EMPTY
	PRESET AREA 7 (PROGRAM 7)	EMPTY
	PRESET AREA 8 (PROGRAM 8)	EMPTY
	PRESET AREA 9 (PROGRAM 9)	EMPTY
	PRESET AREA10 (PROGRAM10)	EMPTY
	PRESET AREA11 (PROGRAM11)	EMPTY
	PRESET AREA12 (PROGRAM12)	EMPTY
	PRESET AREA13 (PROGRAM13)	EMPTY
	PRESET AREA14 (PROGRAM14)	EMPTY
	PRESET AREA15 (PROGRAM15)	EMPTY
	PRESET AREA16 (PROGRAM16)	EMPTY
	PRESET AREA17 (PROGRAM17)	EMPTY
	PRESET AREA18 (PROGRAM18)	EMPTY
	PRESET AREA19 (PROGRAM19)	EMPTY
	PRESET AREA20 (PROGRAM20)	EMPTY
	PRESET AREA21	EMPTY
	PRESET AREA22	EMPTY
	PRESET AREA23	EMPTY
	PRESET AREA24	EMPTY
	PRESET AREA25	EMPTY
	PRESET AREA26	EMPTY
	PRESET AREA27	EMPTY
	PRESET AREA28	EMPTY
	PRESET AREA29	EMPTY
	PRESET AREA30	EMPTY
	PRESET AREA31	EMPTY
	PRESET AREA32	EMPTY
	PRESET AREA33	EMPTY
	PRESET AREA34	EMPTY
	PRESET AREA35	EMPTY
	PRESET AREA36	EMPTY
	PRESET AREA37	EMPTY
	PRESET AREA38	EMPTY
	PRESET AREA39	EMPTY
	PRESET AREA40	EMPTY
	PRESET AREA41	EMPTY
	PRESET AREA42	EMPTY
	PRESET AREA43	EMPTY
	PRESET AREA44	EMPTY
	PRESET AREA45	EMPTY
	PRESET AREA46	EMPTY
	PRESET AREA47	EMPTY
	PRESET AREA48	EMPTY
	PRESET AREA49	EMPTY
	PRESET AREA50	EMPTY
	PRESET AREA51	EMPTY
	PRESET AREA52	EMPTY
	PRESET AREA53	EMPTY
	PRESET AREA54	EMPTY
	PRESET AREA55	EMPTY
	PRESET AREA56	EMPTY
	PRESET AREA57	EMPTY
	PRESET AREA58	EMPTY
	PRESET AREA59	EMPTY
	PRESET AREA60	EMPTY
	PRESET AREA61	EMPTY
	PRESET AREA62	EMPTY
	PRESET AREA63	EMPTY
	PRESET AREA64	EMPTY
	PRESET AREA65	EMPTY
	PRESET AREA66	EMPTY
	PRESET AREA67	EMPTY
	PRESET AREA68	EMPTY
	PRESET AREA69	EMPTY
	PRESET AREA70	EMPTY
	PRESET AREA71	EMPTY
	PRESET AREA72	EMPTY
	PRESET AREA73	EMPTY
	PRESET AREA74	EMPTY

Area	Data Configuration	Standard Value
USER MEMORY	MEMORY No.1	EMPTY
	MEMORY No.2	EMPTY
	MEMORY No.3	EMPTY
	MEMORY No.4	EMPTY
	MEMORY No.5	EMPTY
	MEMORY No.6	EMPTY
	MEMORY No.7	EMPTY
	MEMORY No.8	EMPTY
	MEMORY No.9	EMPTY
	MEMORY No.10	EMPTY
	MEMORY No.11	EMPTY
	MEMORY No.12	EMPTY
	MEMORY No.13	EMPTY
	MEMORY No.14	EMPTY
	MEMORY No.15	EMPTY
	MEMORY No.16	EMPTY
	MEMORY No.17	EMPTY
	MEMORY No.18	EMPTY
	MEMORY No.19	EMPTY
	MEMORY No.20	EMPTY
	NAME (No.1)	• • • • • • • • • •
	NAME (No.2)	• • • • • • • • • •
	NAME (No.3)	• • • • • • • • • •
	NAME (No.4)	• • • • • • • • • •
	NAME (No.5)	• • • • • • • • • •
	NAME (No.6)	• • • • • • • • • •
	NAME (No.7)	• • • • • • • • • •
	NAME (No.8)	• • • • • • • • • •
	NAME (No.9)	• • • • • • • • • •
	NAME (No.10)	• • • • • • • • • •
	NAME (No.11)	• • • • • • • • • •
	NAME (No.12)	• • • • • • • • • •
	NAME (No.13)	• • • • • • • • • •
	NAME (No.14)	• • • • • • • • • •
	NAME (No.15)	• • • • • • • • • •
	NAME (No.16)	• • • • • • • • • •
	NAME (No.17)	• • • • • • • • • •
	NAME (No.18)	• • • • • • • • • •
	NAME (No.19)	• • • • • • • • • •
	NAME (No.20)	• • • • • • • • • •

Table 2. Factory Preset Data

AREA	21	22	23	24	25	26	27	28
NAME	VGA-1	VESA640×350	VESA640×400	VGA	Mac13"	VESA640x480@72	VESA640x480@75	VESA640x480@85
ASPECT	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3
SHARPNES	MID	MID	MID	MID	MID	MID	MID	MID
TOTAL H PIXEL	800	832	832	800	864	832	840	832

AREA	29	30	31	32	33	34	35	36
NAME	VGA (TEXT)	VESA720x400@85	VESA800x600@56	VESA800x600@60	VESA800x600@72	VESA800x600@75	VESA800x600@85	Mac16"
ASPECT	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3
SHARPNES	MID	MID	MID	MID	MID	MID	MID	MID
TOTAL H PIXEL	900	936	1024	1056	1040	1056	1048	1152

AREA	38	39	40	41	42	43	44	45
NAME	VESA1024x768@60	VESA1024x768@70	VESA1024x768@75	VESA1024x768@85	VESA1152x864@75	Mac21"	VESA1280x960@60	VESA1280x960@85
ASPECT	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3
SHARPNES	MID	MID	MID	MID	MID	MID	MID	MID
TOTAL H PIXEL	1344	1328	1312	1376	1600	1456	1800	1728

AREA	46	47	48	49	50	51	52	53
NAME	VESA1280x1024@60	VESA1280x1024@75	VESA1280x1024@85	VESA1600x1200@60	PAL	NTSC	575/50P	480/60P
ASPECT	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3	4 × 3
SHARPNES	MID	MID	MID	MID	LOW	LOW	MID	MID
TOTAL H PIXEL	1688	1688	1728	2160	–	–	1266	800

AREA	54	55	56	59
NAME	1080/48I	1080/50I	1080/60I	720/60P
ASPECT	16 × 9	16 × 9	16 × 9	16 × 9
SHARPNES	MID	MID	MID	MID
TOTAL H PIXEL	1462	1410	1190	1650

Table 3. Preset Timing

AREA	21		22		23		24		25		26		27		28	
NAME	VGA-1		VESA640×350		VESA640×400		VGA		Mac13"		VESA640×480@72		VESA640×480@75		VESA640×480@85	
RESOLUTION	640 × 350		640 × 350		640 × 400		640 × 480		640 × 480		640 × 480		640 × 480		640 × 480	
CLOCK	25.175	MHz	31.5	MHz	31.5	MHz	25.175	MHz	30.24	MHz	31.5	MHz	31.5	MHz	36	MHz
HORIZONTAL																
H.FREQ	31.469	kHz	37.861	kHz	37.861	kHz	31.469	kHz	35	kHz	37.861	kHz	37.5	kHz	43.269	kHz
	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots
H.TOTAL	31.77	800	26.413	832	26.413	832	31.778	800	28.571	864	26.413	832	26.667	840	23.111	832
H.BLK	6.356	160	6.09	192	6.095	192	6.356	160	7.407	224	6.096	192	6.35	200	5.334	192
H.FP	0.318	8	1.015	32	1.016	32	0.636	16	2.116	64	0.762	24	0.508	16	1.556	56
H.SYNC	3.813	96	2.032	64	2.032	64	3.813	96	2.116	64	1.27	40	2.032	64	1.556	56
H.BP	2.225	56	3.048	96	3.048	96	1.907	48	3.175	96	4.064	16	3.81	120	2.222	80
H.ACTIVE	25.422	640	20.317	640	20.317	640	25.422	640	21.164	640	20.317	640	20.317	640	17.778	640
VERTICAL																
V.FREQ	70.086	Hz	85.08	Hz	85.08	Hz	59.94	Hz	66.67	Hz	72.809	Hz	75	Hz	85.008	Hz
	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines
V.TOTAL	14.265	449	11.754	445	11.754	445	16.683	525	15	525	13.735	520	13.333	500	11.764	509
V.BLK	3.145	99	2.509	95	1.189	45	1.43	45	1.286	45	1.055	40	0.534	20	0.67	29
V.FP	0.984	31	0.845	32	0.026	1	0.318	10	0.086	3	0.237	9	0.027	1	0.023	1
V.SYNC	0.063	2	0.079	3	0.079	3	0.064	2	0.086	3	0.079	3	0.08	3	0.069	3
V.BP	2.097	66	1.585	60	1.083	41	1.049	33	1.114	39	0.739	28	0.427	16	0.578	25
V.ACTIVE	11.119	350	9.243	350	10.565	400	15.253	480	13.714	480	12.678	480	12.8	480	11.093	480
SYNC																
SOG									YES							
EXT(H/V)	(+/−)		(+/−)		(−/+)		(−/−)		(−/−)		(−/−)		(−/−)		(−/−)	
EXT(COMP)																
COMP VIDEO																
VIDEO LEVEL	0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V	
SYNC LEVEL	TTL		TTL		TTL		TTL		TTL		TTL		TTL		TTL	

AREA	29		30		31		32		33		34		35		36	
NAME	VGA(TEXT)		VESA720×400@85		VESA800×600@56		VESA800×600@60		VESA800×600@72		VESA800×600@75		VESA800×600@85		Mac16"	
RESOLUTION	720 × 400		720 × 400		800 × 600		800 × 600		800 × 600		800 × 600		800 × 600		832 × 624	
CLOCK	28.332	MHz	35.5	MHz	36	MHz	40	MHz	50	MHz	49.5	MHz	56.25	MHz	57.285	MHz
HORIZONTAL																
H.FREQ	31.469	kHz	37.927	kHz	35.156	kHz	37.879	kHz	48.077	kHz	46.875	kHz	53.674	kHz	49.727	kHz
	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots
H.TOTAL	31.766	900	26.366	936	28.444	1024	26.4	1056	20.8	1040	21.333	1056	18.631	1048	20.11	1152
H.BLK	6.353	180	6.084	216	6.223	224	6.4	256	4.8	240	5.171	256	4.409	248	5.586	320
H.FP	0.635	18	1.014	36	0.667	24	1	40	1.12	56	0.323	16	0.569	32	0.559	32
H.SYNC	3.812	108	2.028	72	2	72	3.2	128	2.4	120	1.616	80	1.138	64	1.117	64
H.BP	1.906	54	3.042	108	3.556	128	2.2	88	1.28	64	3.232	160	2.702	152	3.91	224
H.ACTIVE	25.413	720	20.282	720	22.222	800	20	800	16	800	16.162	800	14.222	800	14.524	832
VERTICAL																
V.FREQ	70.111	Hz	85.039	Hz	56.25	Hz	60.317	Hz	72.188	Hz	75	Hz	85.061	Hz	74.553	Hz
	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines
V.TOTAL	14.263	449	11.759	446	17.778	625	16.579	628	13.853	666	13.333	625	11.756	631	13.413	667
V.BLK	1.557	49	1.212	46	0.711	25	0.739	28	1.373	66	0.533	25	0.578	31	0.865	43
V.FP	0.381	12	0.026	1	0.028	1	0.026	1	0.77	37	0.021	1	0.019	1	0.06	3
V.SYNC	0.064	2	0.079	3	0.057	2	0.106	4	0.125	6	0.064	3	0.056	3	0.06	3
V.BP	1.112	35	1.107	42	0.626	22	0.607	23	0.478	23	0.448	21	0.503	27	0.744	37
V.ACTIVE	12.706	400	10.546	400	17.067	600	15.84	600	12.48	600	12.8	600	11.179	600	12.549	624
SYNC																
SOG																
EXT(H/V)	(−/+)		(−/+)		(+/+)		(+/+)		(+/+)		(+/+)		(+/+)		(−/−)	
EXT(COMP)																
COMP VIDEO																
VIDEO LEVEL	0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V	
SYNC LEVEL	TTL		TTL		TTL		TTL		TTL		TTL		TTL		TTL	

AREA	38		39		40		41		42		43		44		45	
NAME	VESA1024x768@60		VESA1024x768@70		VESA1024x768@75		VESA1024x768@85		VESA1152x864@75		Mac21"		VESA1280x960@60		VESA1280x960@85	
RESOLUTION	1024 × 768		1024 × 768		1024 × 768		1024 × 768		1152 × 864		1152 × 870		1280 × 960		1280 × 960	
CLOCK	65	MHz	75	MHz	78.75	MHz	94.5	MHz	108	MHz	100	MHz	108	MHz	148.5	MHz
HORIZONTAL																
H.FREQ	48.363	kHz	56.476	kHz	60.023	kHz	68.677	kHz	67.5	kHz	68.681	kHz	60	kHz	85.938	kHz
	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots
H.TOTAL	20.677	1344	17.707	1328	16.66	1312	14.561	1376	14.815	1600	14.56	1456	16.667	1800	11.636	1728
H.BLK	4.923	320	4.053	304	3.657	288	3.725	352	4.148	448	3.04	304	4.815	520	3.016	448
H.FP	0.369	24	0.32	24	0.203	16	0.508	48	0.593	64	0.32	32	0.889	96	0.431	64
H.SYNC	2.092	136	1.813	136	1.219	96	1.016	96	1.185	128	1.28	128	1.037	112	1.077	160
H.BP	2.462	160	1.92	144	2.235	176	2.201	208	2.37	256	1.44	144	2.889	312	1.508	224
H.ACTIVE	15.754	1024	13.653	1024	13.003	1024	10.836	1024	10.667	1152	11.52	1152	11.852	1280	8.62	1280
VERTICAL																
V.FREQ	60.004	Hz	70.069	Hz	75.029	Hz	84.997	Hz	75	Hz	75.061	Hz	60	Hz	85.002	Hz
	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines
V.TOTAL	16.666	806	14.272	806	13.328	800	11.765	808	13.333	900	13.323	915	16.667	1000	11.764	1011
V.BLK	0.786	38	0.672	38	0.533	32	0.583	40	0.533	36	0.655	45	0.667	40	0.594	51
V.FP	0.062	3	0.053	3	0.017	1	0.015	1	0.015	1	0.044	3	0.017	1	0.012	1
V.SYNC	0.124	6	0.106	6	0.05	3	0.044	3	0.044	3	0.044	3	0.05	3	0.035	3
V.BP	0.6	29	0.513	29	0.466	28	0.524	36	0.474	32	0.568	39	0.6	36	0.547	47
V.ACTIVE	15.88	768	13.599	768	12.795	768	11.183	768	12.8	864	12.67	870	16	960	11.171	960
SYNC																
SOG																
EXT(H/V)	(–/–)		(–/–)		(+/+)		(+/+)		(+/+)		(–/–)		(+/+)		(+/+)	
EXT(COMP)																
COMP VIDEO																
VIDEO LEVEL	0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V	
SYNC LEVEL	TTL		TTL		TTL		TTL		TTL		TTL		TTL		TTL	

AREA	46		47		48		49		50		51	
NAME	VESA1280x1024@60		VESA1280x1024@75		VESA1280x1024@85		VESA1600x1200@60		PAL		NTSC	
RESOLUTION	1280 × 1024		1280 × 1024		1280 × 1024		1600 × 1200		932 × 573		753 × 483	
CLOCK	108	MHz	135	MHz	157.5	MHz	162	MHz	17.75	MHz	14.318	MHz
HORIZONTAL												
H.FREQ	63.981	kHz	79.976	kHz	91.146	kHz	75	kHz	15.625	kHz	15.734	kHz
	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots	µsec	dots
H.TOTAL	15.63	1688	12.504	1688	10.971	1728	13.333	2160	64	1136	63.556	910
H.BLK	3.777	408	3.023	408	2.844	448	3.457	560	12	213	10.9	156
H.FP	0.444	48	0.119	16	0.406	64	0.395	64	1.5	26	1.5	22
H.SYNC	1.037	112	1.067	144	1.016	160	1.185	192	4.7	84	4.7	67
H.BP	2.296	248	1.837	248	1.422	224	1.877	304	5.8	103	4.7	67
H.ACTIVE	11.852	1280	9.481	1280	8.127	1280	9.877	1600	52	923	52.656	754
VERTICAL												
V.FREQ	60.02	Hz	75.025	Hz	85.024	Hz	60	Hz	50	Hz	59.94	Hz
	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines
V.TOTAL	16.661	1066	13.329	1066	11.761	1072	16.667	1250	20	312.5	16.683	262.5
V.BLK	0.657	42	0.526	42	0.527	48	0.666	50	1.632	25.5	1.303	20.5
V.FP	0.016	1	0.013	1	0.011	1	0.013	1	0.192	3	0.254	4
V.SYNC	0.047	3	0.038	3	0.033	3	0.04	3	0.16	2.5	0.191	3
V.BP	0.594	38	0.475	38	0.483	44	0.613	46	1.28	20	0.858	13.5
V.ACTIVE	16.005	1024	12.804	1024	11.235	1024	16	1200	18.368	287	15.381	245
SYNC												
SOG												
EXT(H/V)	(+/+)		(+/+)		(+/+)		(+/+)					
EXT(COMP)												
COMP VIDEO									YES		YES	
VIDEO LEVEL	0.714V		0.714V		0.714V		0.714V		0.700V		0.714V	
SYNC LEVEL	TTL		TTL		TTL		TTL		0.300V		0.286V	

3-3. White Balance Adjustment

1. Switch the WINDOW to either TYPE1 or TYPE2.
2. Select the COLOR TEMP “HIGH”.
3. Select RED GAIN and GREEN GAIN. Perform the white balance adjustment until the color temperature satisfies the specifications of 9300 K.
   Set BLUE GAIN to 255 normally.
4. Select the COLOR TEMP “LOW”.
5. Set BLUE GAIN to 223. Then select RED GAIN and GREEN GAIN. Perform the white balance adjustment until the color temperature satisfies the specifications of 6500 K.

Note : When the white balance at 6500 K cannot be obtained by any means, decrement the BLUE GAIN by 16 steps and repeat the adjustment of step 5).

6. Switch the WINDOW to OFF.

3-4. A/D Calibration Adjustment

Note : When the part number of the B board and that of B1 board has the suffix of -11, replace the B1 board with the jig board as shown in the following figure (a).

1. Connect the VGA (640 × 480@60) signal to the RGB1 input connector.
2. Select the video signal of the 10 % flat field pattern.
3. Set the CAL mode to ON.
4. Check the following values that are shown in the bottom of the menu in cyan.
   R : XXX / G : XXX / B : XXX
   Adjust RED BIAS and BLUE BIAS until the following two equations are satisfied.
   (G value −1) ≦ R value ≦ (G value +1)
   and
   (G value −1) ≦ B value ≦ (G value +1)
   (Do not adjust GREEN BIAS.)
5. Select the video signal of the maximum brightness 90 % gray scale pattern.
   (Select the gray scale pattern that has the left half of display in black and the right half of display in white.)
6. Check the following values that are shown in the bottom of the menu in cyan.
   R : XXX / G : XXX / B : XXX
   Adjust RED BIAS and BLUE BIAS until the following two equations are satisfied.
   (G value −1) ≦ R value ≦ (G value +1)
   and
   (G value −1) ≦ B value ≦ (G value +1)
   (Do not adjust GREEN BIAS.)
7. Set the CAL mode to OFF.

B1 jig board (The B1 jig board is necessary for the B/B1 board that has part number with suffix of -11.)

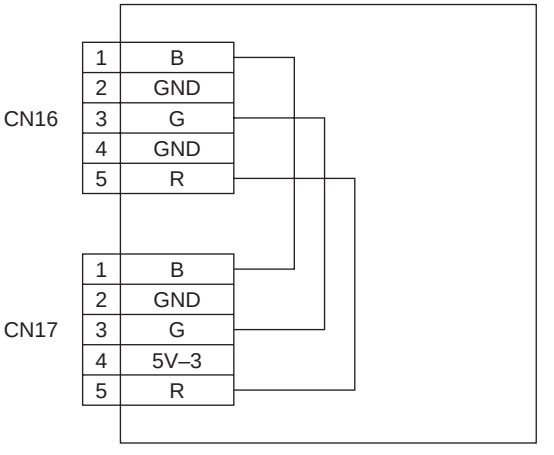


Fig. (a)

3-5. Video Processor Adjustment

YUV Level Check and Adjustment

1. Connect the 525/60 signal to the YUV input connector.
2. Select the color bar signal.
3. Measure the voltage waveform at pin-14 of IC1003 with an oscilloscope. Confirm that the video signal excluding sync signal has the following amplitude.
   660 mV ± 5 %
   (If the video signal excluding sync is outside the specifications, adjust the video signal level using the Y GAIN.)
4. Measure the voltage waveform at pin-15 of IC1003 with an oscilloscope. Confirm that the R-Y signal has the following amplitude.
   580 mV ± 5 %
   (If the R-Y signal is outside the specifications, adjust the R-Y signal level using the R-Y GAIN.)
5. Measure the voltage waveform at pin-4 of IC1003 with an oscilloscope. Confirm that the B-Y signal has the following amplitude.
   700 mV ± 5 %
   (If the B-Y signal is outside the specifications, adjust the B-Y signal level using the B-Y GAIN.)

Cutoff Adjustment

1. Connect the Y signal of the 525/60 signal to the Y input only of the YUV input connector.
2. Select the gray scale signal.
3. Observe the dark area of display screen. Adjust R CUTOFF and B CUTOFF until the dark area has completely no color at all.

3-6. Watch Error Adjustment

1. Connect the jig circuit as shown in Fig. (b) and a frequency counter to the B board CN18.
2. Enter the measurement value on a frequency counter in the WATCH ERROR.

WATCH ERROR Jig Circuit

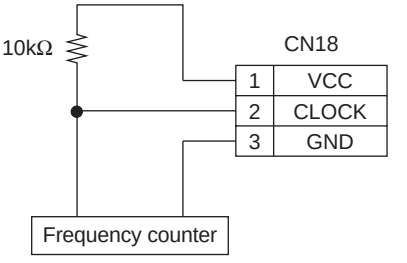


Fig. (b)

3-7. Switching Regulator (APS-132 M/136 M Board) Adjustments

3-7-1. Preparation

1. Remove the switching regulator from the set, and adjust it under no load.
2. If adjusting the switching regulator with each output loaded, set as follows.

• Load on each output

Output	Pin No.	MIN	MAX
VCC	CN4 ① pin	1.0 A	5.0 A
VS	CN5 ② pin	0.5 A	1.7 A
VA	CN5 ⑤ pin	0.5 A	1.5 A
AUDIO +B	CN6 ③ pin	0.05 A	1.0 A
STBY +5 V	CN7 ② pin	0.2 A	0.3 A
5VD	CN7 ⑤ pin	1.2 A	1.8 A
6.2 V	CN7 ⑧ pin	0.6 A	1.0 A
13.5 V	CN7 ⑫ pin	0.5 A	1.0 A
13 V	CN7 ⑭ pin	0.4 A	1.0 A

3-7-2. 13 V System Minimum Frequency Adjustment

1. Apply 18 V DC to both ends of C169.
2. Connect a frequency counter between gate and source of Q153.

Note : As the input of frequency counter, use 10 : 1 oscilloscope probes and raise the input impedance.

3. Adjust the RV150 so that the oscillation frequency is 93 ± 0.5 kHz.

3-7-3. VS System Minimum Frequency Adjustment

1. Short between pin-3 and pin-4 of PH501.
2. Apply 18 V DC to both ends of C169.
3. Connect a frequency counter between gate and source of Q503.

Note : As the input of frequency counter, use 10 : 1 oscilloscope probes and raise the input impedance.

4. Adjust the RV500 so that the oscillation frequency is 49 ± 0.5 kHz.

3-7-4. VA System Minimum Frequency Adjustment

1. Short between pin-3 and pin-4 of PH701.
2. Apply 18 V DC to both ends of C169.
3. Connect a frequency counter between gate and source of Q703.

Note : As the input of frequency counter, use 10 : 1 oscilloscope probes and raise the input impedance.

4. Adjust the RV700 so that the oscillation frequency is 65 ± 0.5 kHz.

3-7-5. PFC Voltage Adjustment

1. Set the load on each output to the minimum.
2. Apply 100 V AC.
3. Turn the $\overline{\text{STBY}}$ signal ON. (short between CN7 pin-1 and pin-2).
4. Adjust the RV300 so that the voltage across C115 is 385 ± 2 V.

3-7-6. 5 V Adjustment

1. Set the load on each output to the minimum.
2. Apply 100 V AC.
3. Adjust the RV201 so that the voltage of STBY +5 V output (between CN7 pin-2 and pin-6) is 5.12 ± 0.03 V.

3-7-7. 13.5 V Adjustment

1. Set the load on each output to the minimum.
2. Apply 100 V AC.
3. Turn the $\overline{\text{STBY}}$ signal ON. (short between CN7 pin-1 and pin-2).
4. Adjust the RV250 so that the voltage of 13.5 V output (between CN7 pin-12 and pin-11) satisfies the following specifications.

   Specification value
   PFM-500A3W : 13.95 ± 0.05 V
   PFM-510A2W : 13.7 ± 0.05 V

3-7-8. VS Adjustment

1. Open the load on VS and VA outputs, and set the load on the other outputs to the minimum.
2. Apply 100 V AC.
3. Turn the STBY signal ON (short between CN7 pin-1 and pin-2), and also the VRR signal ON (short between CN4 pin-7 and CN7 pin-2).
4. Apply 0 V DC to the VRS (CN4 pin-3).
   Use CN4 pin-4 as GND.
5. Adjust the RV402 so that the voltage of VS output (between CN5 pin-2 and pin-6) is about 149 V.
6. Adjust the RV400 so that the voltage satisfies the following specifications.

   Specification value
   PFM-500A3W : 164.3 V
   PFM-510A2W : 149.2 V

7. Adjust the RV402 so that the voltage satisfies the following specifications.

   Specification value
   PFM-500A3W : 165 ± 0.1 V
   PFM-510A2W : 150 ± 0.1 V

8. Apply 2 V DC to the VRS.
9. Check that the voltage satisfies the following specifications. If the measured value is out of the range, repeat the above steps from 4, where in step 6, shift the adjustment value a little, then check the voltage.

   Specification value
   PFM-500A3W : 185 ± 0.3 V
   PFM-510A2W : 170 ± 0.3 V

3-7-9. VS OCP (Only PFM-510A2W)

1. Set the load on each output to the minimum.
2. Apply 100 V AC.
3. Turn the STBY signal ON (short between CN7 pin-1 and pin-2), and also the VRR signal ON (short between CN4 pin-7 and CN7 pin-2).
4. Apply 0 V DC to the VRS (CN4 pin-3).
   Use CN4 pin-4 as GND.
5. Connect a voltmeter to the VS output (between CN5 pin-2 and pin-6).
6. Set the load on VS output to 3.8 A, and rotate the RV401 until the output voltage varies.

Note : Be careful, not to turn excssively, because power can not be obtained.

3-7-10. VA Adjustment

1. Open the load on VS and VA outputs, and set the load on the other outputs to the minimum.
2. Apply 100 V AC.
3. Turn the STBY signal ON (short between CN7 pin-1 and pin-2), and also the VRR signal ON (short between CN4 pin-7 and CN7 pin-2).
4. Apply 0 V DC to the VRA (CN4 pin-5).
   Use CN4 pin-6 as GND.
5. Adjust the RV602 so that the voltage of VA output (between CN5 pin-5 and pin-1) is about 49 V.
6. Adjust the RV600 so that the voltage satisfies the following specifications.

   Specification value
   PFM-500A3W : 54.5 V
   PFM-510A2W : 49.2 V

7. Adjust the RV602 so that the voltage satisfies the following specifications.

   Specification value
   PFM-500A3W : 55 ± 0.1 V
   PFM-510A2W : 50 ± 0.1 V

8. Apply 2 V DC to the VRA.
9. Check that the voltage satisfies the following specifications. If the measured value is out of the range, repeat the above steps from 4, where in step 6, shift the adjustment value a little, then check the voltage.

Note : As the output voltage varies according to the voltage applied to the VRA, do not shift the applied voltage (2 V DC).

   Specification value
   PFM-500A3W : 65 ± 0.3 V
   PFM-510A2W : 70 ± 0.3 V

3-7-11. VA OCP (Only PFM-510A2W)

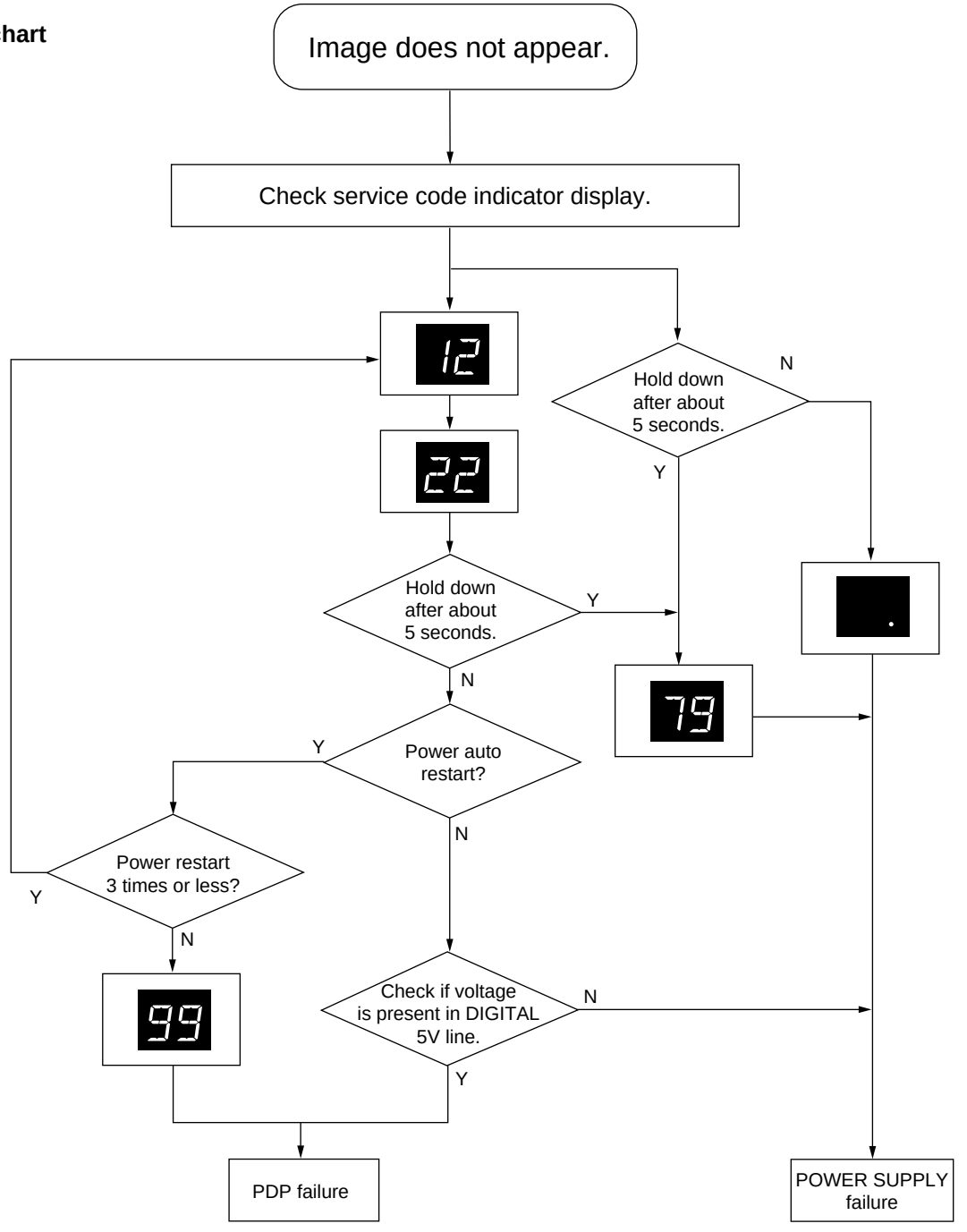
1. Set the load on each output to the minimum.
2. Apply 100 V AC.
3. Turn the STBY signal ON (short between CN7 pin-1 and pin-2), and also the VRR signal ON (short between CN4 pin-7 and CN7 pin-2).
4. Apply 0 V DC to the VRA (CN4 pin-5).
   Use CN4 pin-6 as GND.
5. Connect a voltmeter to the VA output (between CN5 pin-5 and pin-1).
6. Set the load on VA output to 4.4 A, and rotate the RV601 until the output voltage varies.

Note : Be careful, not to turn excssively, because power can not be obtained.

Section 4
Trouble Shooting

4-1. Judging Method When Image Does Not Appear

1. Flow chart



2. How to find PDP unit trouble

1) The power must be supplied normally to the PDP unit. This power is supplied through two black 8-pin connectors from the power unit. The kinds of power supply are 160 V line, 60 V line, and 5 V line.

2) As input signals, H.SYNC (negative polarity), V.SYNC (negative polarity), BLANKING (negative polarity), CLOCK and RGB digital data (8 bit × 3) must be entered normally and DISPEN must be “high”.

   If no images appears through the above conditions are satisfied, the PDP unit will be defective.

4-2. Self Diagnosis Function

4-2-1. Outline

The PFM-500A3W/510A2W has the self diagnosis function using A/D converter to detect the power supply analog voltages, 8 channels of temperature sensor, fan operations, power unit temperature, DC voltage status, and to check the EEPROM and the watch register. When any abnormality occurs or defect is detected, the Error Code appears on the service code indicator of the power supply block, the standby indicator on the control panel flashes and the detected data is displayed on the service menu [STATUS/TEST] block. If the abnormal status exceeds the allowable limit, the PFM-500A3W/510A2W is forced to shut down.

The detection items are shown as follows.

1. Increase and decrease of the panel DC voltage Vs is detected.
2. Increase and decrease of the panel DC voltage Va is detected.
3. Increase of temperature at the side of the power block in the top of the panel is detected and shut down of the machine.
4. Increase of temperature at the center in the top of the panel is detected and shut down of the machine.
5. Increase of temperature at the side of the input connector block in the top of the panel is detected and shut down of the machine.
6. Detection of outside environment temperature.
7. Detection of fan stop and that of drive circuit failure.
   * Three fans at the top of the panel and two fans for power supply.
8. Detection of temperature rise in the power supply block.
9. Shut down when the 5 V for internal digital circuit has abnormality.
10. Detection of failure of the EEPROM.
11. Detection of abnormality in communication with scan converter.
12. Detection of failure in the ON/OFF control of power supply.
13. Detection of decreased backup power supply voltage for watch and detection of abnormality in oscillator.
14. Detection of PDP failure using the combination of the voltage detection and shut down of the machine.

4-2-2. Criteria for Judgment of Abnormality

1. Increase and decrease of the panel DC voltage Vs is detected.
   (Name of this function on the service menu : POWER SUPPLY - PDP VS)
   • PFM-510A2W
   The normal operating range is + 160 V + 24 V/− 22 V.
   Warning of increase of the voltage Vs when 184 V or more : Service code [11]
   Warning of decrease of the voltage Vs when 138 V or less : Service code [12]
   • PFM-500A3W
   The normal operating range is + 175 V + 26 V/− 23 V.
   Warning of increase of the voltage Vs when 201 V or more : Service code [11]
   Warning of decrease of the voltage Vs when 152 V or less : Service code [12]

2. Increase and decrease of the panel DC voltage Va is detected.
   (Name of this function on the service menu : POWER SUPPLY - PDP VA)
   The normal operating range is + 60 V + 15 V/− 14 V.
   Warning of increase of the voltage Va when 75 V or more : Service code [21]
   Warning of decrease of the voltage Va when 46 V or less : Service code [22]

3. Increase of temperature at the side of the power block in the top of the panel is detected and shut down of the machine.
   (Name of this function on the service menu : TEMPERATURE - P/S BLOCK SIDE)
   The normal operating range is up to 57 °C.
   Warning of high temperature when 58 °C or higher : Service code [31]
   Shut down at the temperature of 68 °C or higher : Service code [39]

4. Increase of temperature at the center in the top of the panel is detected and shut down of the machine.
   (Name of this function on the service menu : TEMPERATURE - CENTER)
   The normal operating range is up to 55 °C.
   Warning of high temperature when 56 °C or higher : Service code [A1]
   Shut down at the temperature of 66 °C or higher : Service code [A9]

5. Increase of temperature at the side of the input connector block in the top of the panel is detected and shut down of the machine.
   (Name of this function on the service menu : TEMPERATURE - I/O BLOCK SIDE)
   The normal operating range is up to 53 °C.
   Warning of high temperature when 54 °C or higher : Service code [41]
   Shut down at the temperature of 64 °C or higher : Service code [49]

6. Detection of outside environment temperature
(Name of this function on the service menu : TEMPERATURE - AMBIENT TEMP)
Occurrence of abnormality and fault is judged solely from the internal temperature of the PFM-500A3W/510A2W. Measurement of the ambient temperature aims mainly at the confirmation of the operating environment. Therefore, there is no chance to indicate this warning message.
Warning of high temperature at 60 °C or higher : Service code [F1]

7. Detection of fan stop and that of drive circuit failure.
• Detection if fan is stopped or not.
(Name of this function on the service menu : FAN - I/O BLOCK SIDE, CENTER, P/S BLOCK SIDE, No. 1, No. 2)
Status of the respective fans are displayed as OK or NG on the service menu STATUS.
  • Fan of the power supply block at the top of the rear of the machine : Service code [55]
  • Fan in the center of the top on the rear of the machine : Service code [54]
  • Fan on the input terminal at the top on the rear of the machine : Service code [53]
  • Two fans of the power supply block : Service code [52] or [51]

• Detection of fan drive circuit failure
(Name of this function on the service menu : FAN - DRIVE CIRCUIT)
The warning when the fan drive data is 6 V or more and the actual drive voltage is 2 V or less : Service code [58]

8. Detection of temperature rise in the power supply block.
(Name of this function on the service menu : TEMPERATURE - P/S INTERNAL)
Warning of high temperature when temperature of the heat sink for main converter inside the power supply unit exceeds the allowable limit : Service code [61]

9. Shut down when the 5 V for internal digital circuit has abnormality.
(Name of this function on the service menu : POWER SUPPLY - DIGITAL 5V)
The voltage that is input to pin-62 of the system controller (IC252) is detected.
Shut down when there is no input voltage : Service code [79]

10. Detection of failure of the EEPROM.
(Name of this function on the service menu : Nil)
Warning when communication with EEPROM cannot be performed normally.
EEPROM ID code error : Service code [81]
EEPROM data write error : Service code [82]
EEPROM data read error : Service code [83]
EEPROM failure : Service code [85]

11. Detection of abnormality in communication with scan converter.
(Name of this function on the service menu : Nil)
Warning when communication with scan converter cannot be performed normally.
EEPROM ID code error : Service code [91]

12. Detection of failure in the ON/OFF control of power supply.
(Name of this function on the service menu : Nil)
When the digital 5 V power does not decrease even in the STBY state, the machine enters the POWR ON state automatically : Service code [98]

13. Detection of decreased voltage of the backup power supply for watch and detection of abnormality of oscillator.
(Name of this function on the service menu : Nil)
Normal/abnormal is detected from the register value inside the watch IC.
Initialization of time due to abnormal register value : Service code [B1]
Warning of low voltage of backup power supply : Service code [B2]
Warning that crystal oscillator for watch has stopped : Service code [B3]

14. Detection of PDP failure using the combination of the voltage detection and shut down of the machine.
(Name of this function on the service menu : Nil)
PDP is suspected to be defective when DIGITAL 5 V is normal among the voltages (VS, VA, DIGITAL 5 V) required to drive PDP while both VS and VA are not inputted.
When all the following conditions are satisfied, the machine enters once to the STANDBY mode then turn the main power back on again.
  1) DC 180 V power is 40 V or less.
  2) DC 70 V power is 20 V or less.
  3) DIGITAL 5 V is normal.

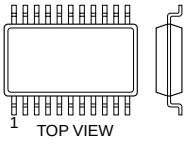
The above-described operation is repeated three times. If the above three conditions are still satisfied, the PDP is judged to be faulty and the main power is shut down.
Service code [99]

4-3. Error Code Table

Error Code on Display	Abnormal/Defective State	Name of Function	
11	Warning of increase of panel high voltage (Vs)	POWER SUPPLY	PDP VS
12	Warning of decrease of panel high voltage (Vs)	POWER SUPPLY	PDP VS
21	Warning of increase of panel middle voltage (Va)	POWER SUPPLY	PDP VA
22	Warning of decrease of panel middle voltage (Va)	POWER SUPPLY	PDPVA
31	Warning of increase of temperature at the power supply block in the top of the panel	TEMPERATURE	P/S BLOCK SIDE
39	Power shut down due to increase of temperature at the power supply block in the top of the panel	TEMPERATURE	P/S BLOCK SIDE
A1	Warning of increase of temperature at the center of the top of the panel	TEMPERATURE	CENTER
A9	Power shut down due to increase of temperature at the center of the top of the panel	TEMPERATURE	CENTER
41	Warning of increase of temperature at the input/output block of the top of the panel	TEMPERATURE	I/O BLOCK SIDE
49	Power shut down due to increase of temperature at the input/output block of the top of the panel	TEMPERATURE	I/O BLOCK SIDE
51	Warning of stoppage of air intake fan-1 of the power supply block	FAN	No.1
52	Warning of stoppage of air intake fan-2 of the power supply block	FAN	No.2
53	Warning of stoppage of fan at the input/output block of the panel top	FAN	I/O BLOCK SIDE
54	Warning of stoppage of fan at the center of the panel top	FAN	CENTER
55	Warning of stoppage of fan of the power supply block in the top of the panel	FAN	P/S BLOCK SIDE
58	Failure of fan drive circuit	FAN	DRIVE CIRCUIT
79	Power shut down due to decrease of DIGITAL 5 V		
81	EEPROM ID error		
82	EEPROM write error		
83	EEPROM read error		
85	EEPROM is defective		
91	Communication with scan converter is defective		
98	Failure that voltage does not decrease at POWER OFF		
99	Panel is defective		
B1	Warning of initialization of time data due to watch control error		
B2	Decrease of the backup power voltage for watch		
B3	Oscillator for watch is defective		
F1	Warning of increase of ambient temperature		

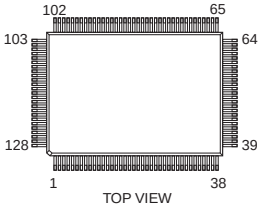
Section 5
Semiconductors

24LC21T/SN
BA10358F-T2
CXA1211M-T4
LM1881MX
M24C04-WMN6T
M24C64-WMN6T
MM1113XFBE
NJM2903M-T2
NJM2904E(TE2)
ST49C101ACF8-05-TR
TC4W53FU(TE12R)
TC4W66F(TE12R)
TC7W126FU(TE12R)
TL026CPS-E05
µPC358G2-T1

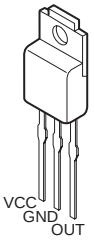


8pin SOP

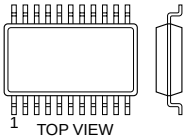
AD9884AKS-140



BA033FP-E2

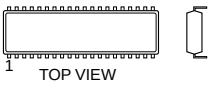


BA7657F-E2
TA8184F(EL)



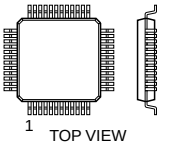
24pin SOP

CXA1739S



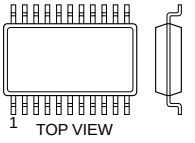
48pin DIP

CXA1860Q-T4
CXD2300Q-T4



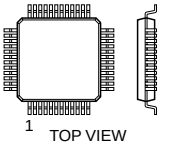
32pin QFP

CXA2119M-T6
MB90096PF-G-182-BND-ER



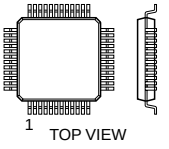
28pin SOP

CXD2030R



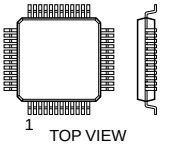
144pin QFP

CXD2090Q



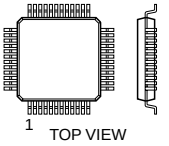
208pin QFP

CXD2309Q-T6
ISPLSI2032E-110LT48



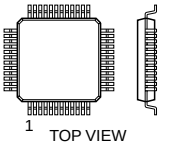
48pin QFP

EPFQC240AA



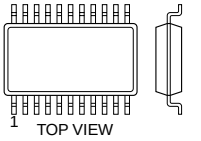
240pin QFP

HD64F2633TE



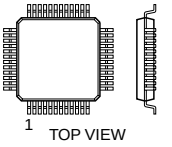
120pin QFP

ICS9161A-01CW16T
MAX202CSE-T
MC74HC4052F-T2
MC74HC4538AF-T1
MC74HC595AF-T2
TC74HC123AF(EL)
TC74HC157AF(EL)
TC74HC4053AF(EL)



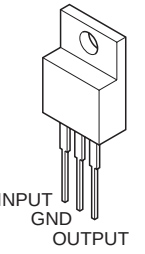
16pin SOP

ISPLSI2192VE-100LT128

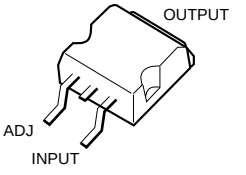


128pin QFP

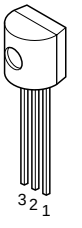
LM2940CT-12FL91
LM2940CT-5.0
LM2940CT-9.0



LM317T



LM35DZ



M52347FP-TE
M62352GP-75ED
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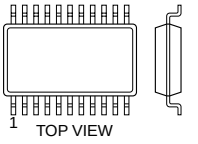
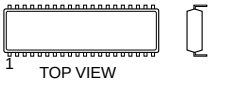
TC74LCX244F(EL)
TC74VHCT245AFT(EL)
TDA8395T/N3



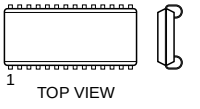
20pin SOP

MC68HC05P6SC442119B



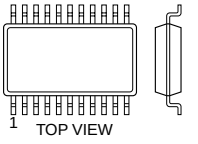
28pin DIP

MSM514265C-60JSDR1



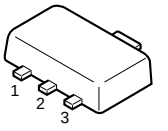
40pin SOJ

MSM56V16160D-10TS-K

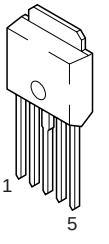


50pin SOP

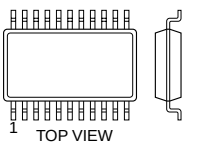
PQ07VZ012P



PQ3TZ53U



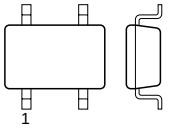
RS5C348A-E2



10pin SOP

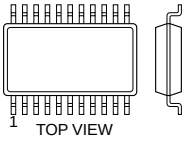
IC, Transistor, Diode

S-80842ANNP-ED6-T2



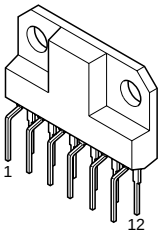
4pin CHIP

SN74LVC125APWR
TC74HC04AF-TP2
TC74HC125AF(EL)
TC74VHC14F(EL)
TC74VHCT04AF(EL)
TLC2932IPW-E20
TLC2933IPWR

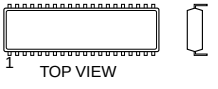


14pin SOP

TA8216H

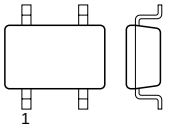


TC74HC126AF(EL)



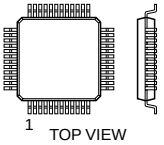
14pin DIP

TC7S04F(TE85R)
TC7S04FU(TE85R)
TC7S08FU(TE85R)



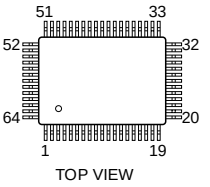
5pin CHIP

THC63LVDF84A-T

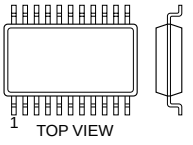


56pin QFP

TLC5733AIPM

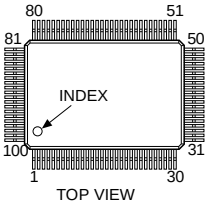


UPC1862GS-E2

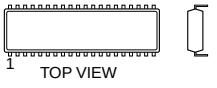


36pin SOP

UPD64082GF-3BA

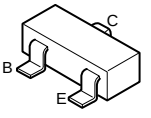


Z8622812PSC

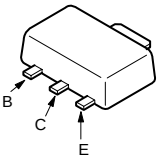


18pin DIP

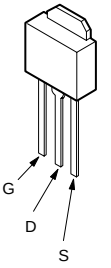
2SA1036K-T-146-R
2SA1037AK-T146-QR
2SA1037K-T-146-S
2SB709A-QRS-TX
2SC2412K-T-146-Q
2SC2412K-T-146-QR
2SC2412K-T-146-R
2SC2412K-T-146-S
DTA114EKA-T146
DTA144EKA-T146
DTC114EKA-T146
DTC144EKA-T146



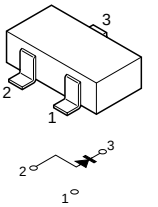
2SA1213Y-TE12L



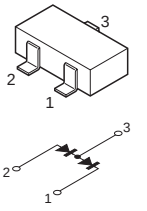
2SJ377(TE16L)



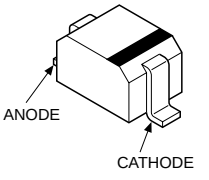
02CZ10-TE85L
RD5.6M-T1B2



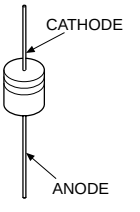
1SS226-TE85L
MA157-TX



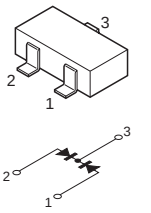
1SS355TE-17
DTZ-TT11-3.3B
HVU359TRF
MA111-TX
UDZ-TE-17-12B
UDZ-TE-17-3.9B
UDZ-TE-17-36B
UDZ-TE-17-4.7B
UDZ-TE-17-5.6B



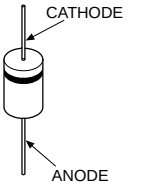
D1N20R-TR
RD10ES-T1B2



DAN202K-T-146



RD33ES-T1B2



Section 6
Exploded Views

NOTE :

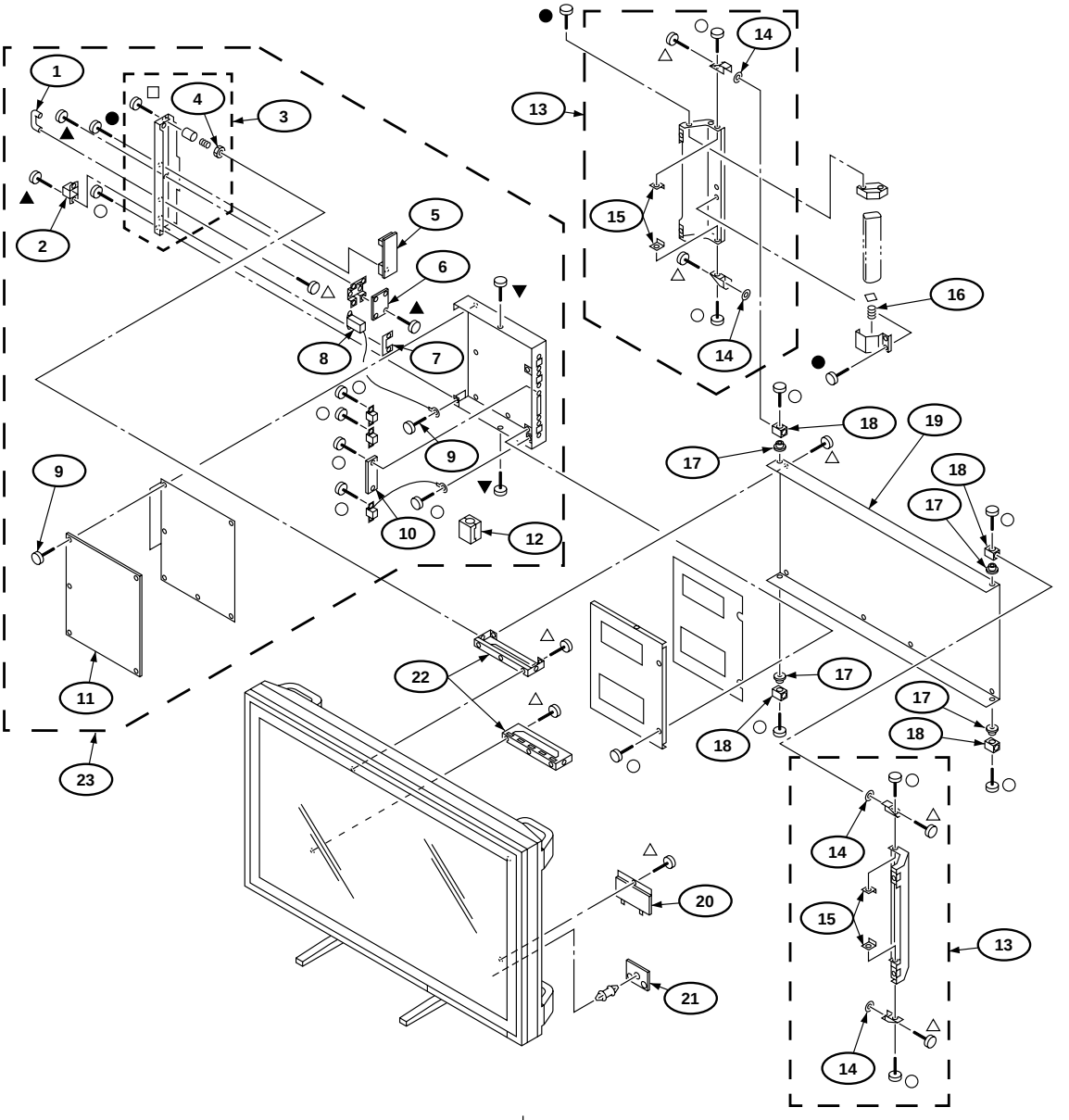
The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.

6-1. Power Block

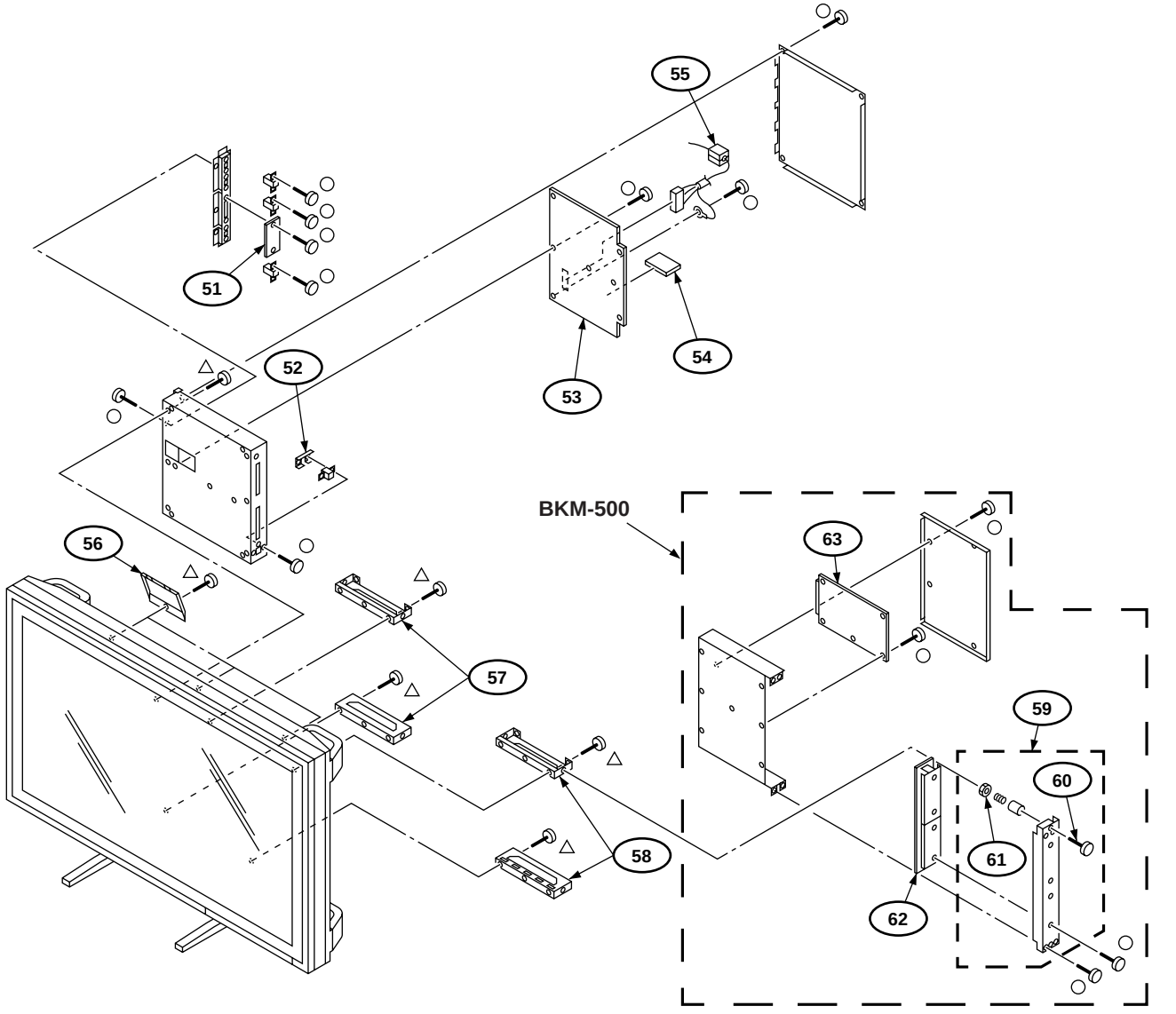
●: 7-685-648-79 +BVTP3x12 ○: 7-682-949-09 +PSW3x10
▲: 7-682-950-09 +PSW3x12 △: 7-682-962-09 +PSW4x10
▼: 7-682-249-04 +K3x10 □: 7-682-566-04 +B4x20



Ref.No.		Part No.	Description	Remark
1		4-052-200-01	HANDLE, PROTECTOR	
2		2-990-241-02	HOLDER (A), PLUG	
3	*	X-4036-671-3	PANEL ASSY, POWER UNIT	4
4	*	3-648-057-00	NUT (ISO-4), U	
5	*	A-1373-813-A	UA MOUNT	
6	*	A-1272-048-A	AF MOUNT	
7		3-625-620-00	BRACKET, AC CONNECTOR	
8	⚠	1-540-178-21	INLET, AC (GL-2100C-30)	
9		4-066-309-01	SCREW, MACHINE, (+) P M4X8	
10	*	A-1311-857-A	G2 MOUNT (PFM-500A3W)	
10	*	A-1311-853-A	G2 MOUNT (PFM-510A2W)	
11		1-468-522-11	REGULATOR, SWITCHING (APS-136 M BOARD) (PFM-500A3W)	
11		1-468-447-11	REGULATOR, SWITCHING (APS-132 M BOARD) (PFM-510A2W)	
12		1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE) (PFM-510A2W)	
13	*	X-4035-827-1	COVER ASSY, SIDE	14, 15
14		3-696-510-01	WASHER (3), STOPPER	
15		4-065-249-01	NUT, PLATE	
16		3-669-594-00	SPRING, COMPRESSION	
17	*	4-075-284-01	SPACER	
18		4-065-239-01	NUT	
19	*	4-074-162-01	COVER, REAR	
20	*	4-065-262-01	COVER, HAND HOLE	
21	*	A-1372-828-A	H6 MOUNT	
22	*	X-4035-835-2	BRACKET ASSY (A), REAR COVER	
23	*	A-1484-854-A	POWER BLOCK ASSY (PFM-500A3W)	1-17
23	*	A-1484-837-A	POWER BLOCK ASSY (PFM-510A2W)	1-17

6-2. SC and I/O Blocks

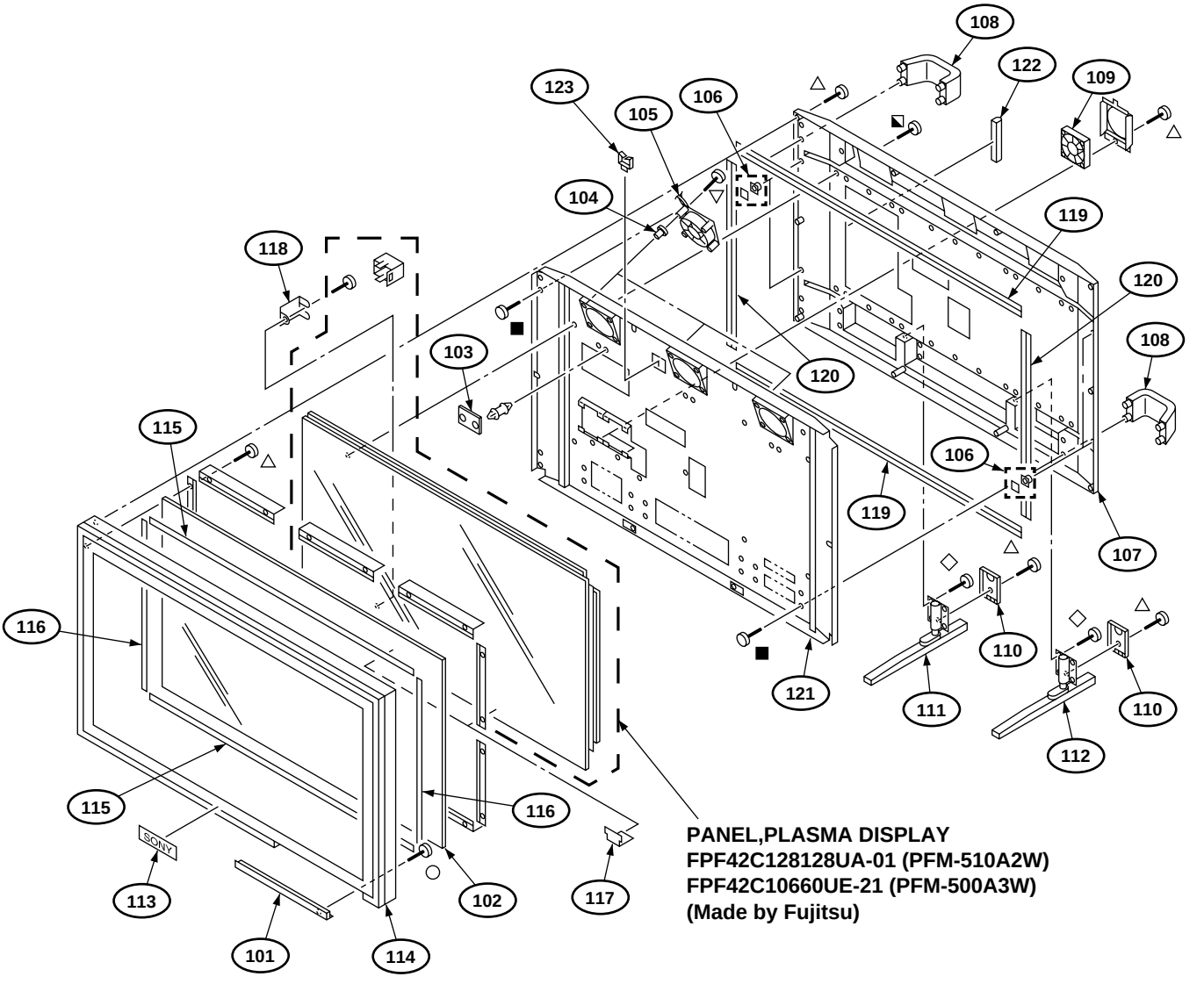
○: 7-682-949-09 +PSW3x10
△: 7-682-962-09 +PSW4x10



Ref.No.		Part No.	Description	Remark
51	*	A-1311-858-A	G1 MOUNT (PFM-500A3W)	
51	*	A-1311-854-A	G1 MOUNT (PFM-510A2W)	
52		4-065-253-01	NUT (A), PLATE	
53	*	A-1131-604-A	B MOUNT (PFM-500A3W)	
53	*	A-1131-595-A	B MOUNT (PFM-510A2W)	
54	*	A-1131-596-A	B1 MOUNT	
55		1-500-037-11	CORE, FERRITE (WITH CASE)	
56	*	4-067-117-01	COVER, FAN	
57	*	X-4035-917-2	BRACKET ASSY (B), REAR COVER	
58	*	X-4035-835-2	BRACKET ASSY (A), REAR COVER	
59	*	X-4035-837-3	PANEL ASSY, I/O UNIT	60, 61
60	*	4-050-804-01	SCREW, PANEL STOPPER	
61	*	3-648-057-00	NUT (ISO-4), U	
62	*	A-1373-812-A	UJ MOUNT	
63	*	A-1372-829-A	H1 MOUNT	

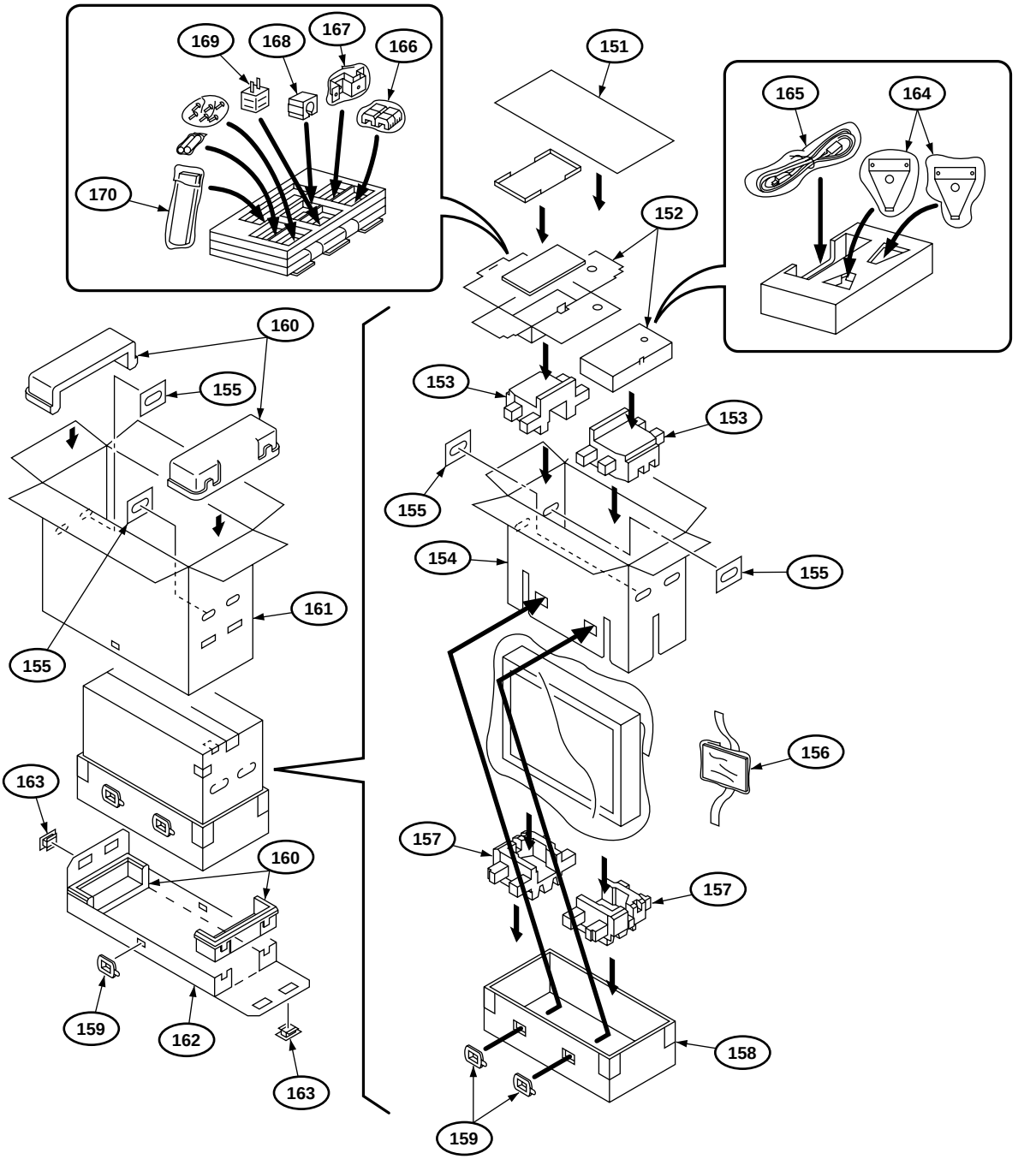
6-3. Cabinet Block

■ : 7-682-973-49 +PSW5x16 ▽ : 7-682-970-09 +PSW4x40
○ : 7-682-949-09 +PSW3x10 ◇ : 7-682-965-01 MACHINE SCREW +P M4x16
△ : 7-682-962-09 +PSW4x10 ◪ : 7-628-000-08 +PSW5x50



Ref.No.		Part No.	Description	Remark
101		1-475-914-12	BOARD UNIT, KEY	
102		1-758-502-11	GLASS, OPTICAL FILTER (PFM-500A3W)	
102	*	1-758-411-11	GLASS, OPTICAL FILTER (PFM-510A2W)	
103	*	A-1391-046-A	S1 MOUNT	
104		4-062-616-01	BUSHING, RUBBER	
105		1-763-144-11	FAN, DC	
106		X-4035-885-1	NUT ASSY, PLATE	
107	*	X-4037-115-1	CABINET ASSY, REAR	
108	*	4-070-197-01	HANDLE	
109		1-763-370-11	FAN, DC (WITH SENSOR)	
110	*	4-065-296-01	COVER, FOOT	
111	*	X-4035-829-1	FOOT (L) ASSY	
112	*	X-4035-828-1	FOOT (R) ASSY	
113	*	X-4036-360-1	EMBLEM ASSY	
114		X-4035-913-2	BEZEL ASSY	
115	*	4-065-188-31	GASKET	
116	*	4-065-188-21	GASKET	
117	*	4-070-356-01	PLATE, PROTECTION	
118	*	4-070-357-01	PLATE, EARTH	
119	*	4-071-740-01	GASKET	
120	*	4-071-739-01	GASKET	
121	*	X-4035-832-7	SHIELD ASSY, MAIN	
122	*	4-071-738-01	GASKET	
123	*	3-646-071-02	HOLDER, WIRE	

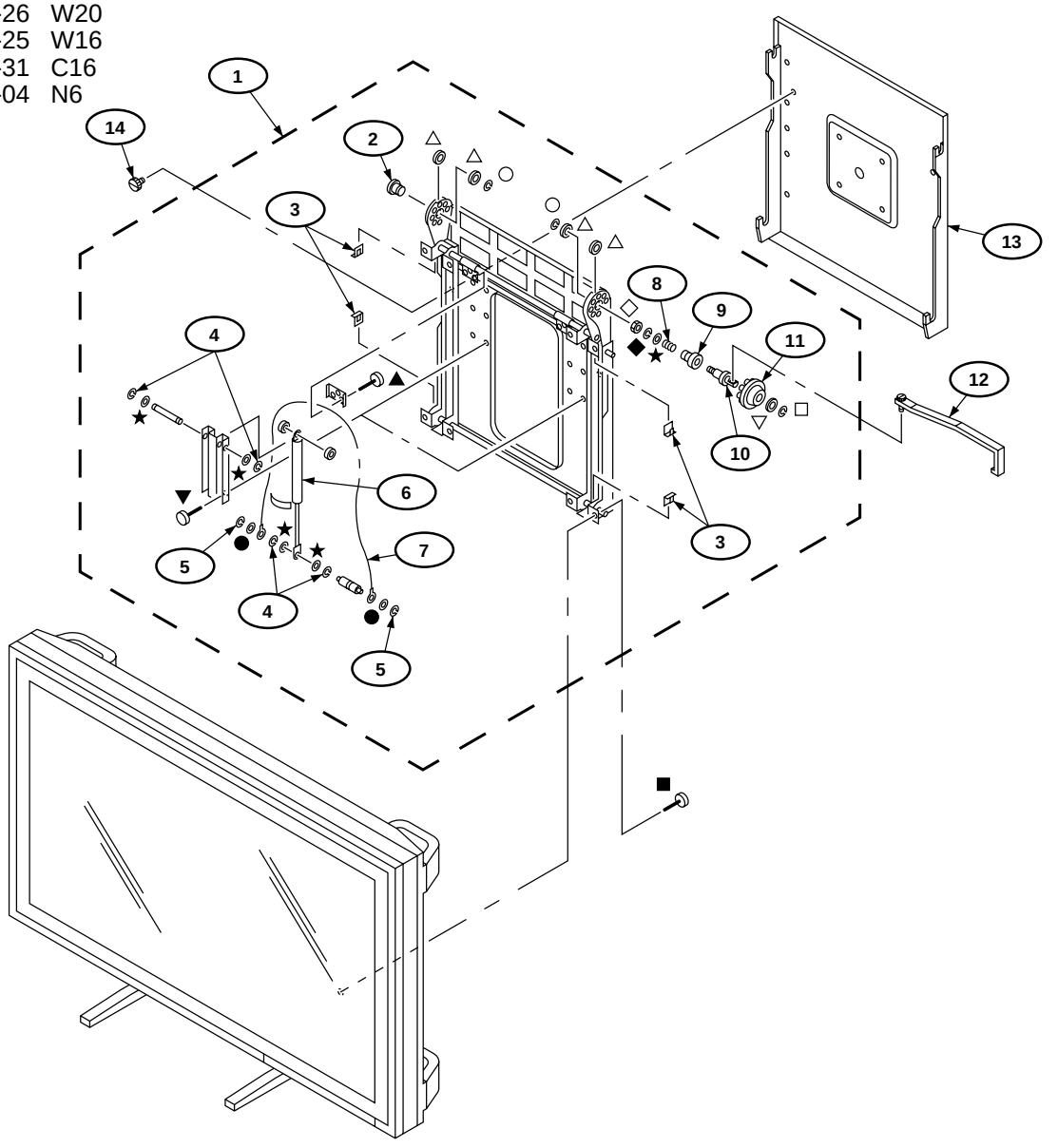
6-4. Packing Materials



Ref.No.	Part No.	Description	Remark
151	* 4-066-055-01	BOARD, TOP	
152	* 4-069-139-01	BOX, ACCESSORY	
153	* 4-069-133-01	CUSHION (UPPER) (ASSY)	
154	* 4-070-492-02	INDIVIDUAL CARTON	155
155	* 3-704-066-01	HANDLE (B)	
156	4-076-854-01	OPERATING INSTRUCTIONS	
157	* 4-069-134-01	CUSHION (LOWER) (ASSY)	
158	* 4-065-581-01	TRAY	
159	* 3-674-673-01	STOPPER (A)	
160	* 4-070-419-01	CUSHION (A)	
161	* 4-070-417-02	INDIVIDUAL CARTON (A)	155
162	* 4-070-418-01	TRAY (A)	
163	* 4-396-077-01	JOINT	
164	* 4-072-155-01	REINFORCEMENT, FOOT	
165	⚠ 1-558-527-11	CORD SET, POWER (13A/125V) (U/C)	
	⚠ 1-590-151-11	CORD SET, POWER (10A/250V) (AEP, E)	
166	1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)	
167	* 4-065-463-01	BRACKET, FOOT	
168	2-990-242-01	HOLDER (B), PLUG	
169	1-750-686-11	CONNECTOR, CONVERSION (3P-2P)	
170	1-475-089-11	REMOTE COMMANDER (RM-921)	

6-5. MB-514

●: 7-688-005-02 W5
▲: 7-682-948-09 +PSW3x8
▼: 7-682-961-09 +PSW4x8
■: 7-682-973-49 +PSW5x16
◆: 7-623-213-22 SW6
★: 7-688-006-12 W6
○: 7-624-197-71 C20
△: 7-688-000-26 W20
▽: 7-688-000-25 W16
□: 7-624-197-31 C16
◇: 7-684-026-04 N6



Ref.No.		Part No.	Description	Remark
1	*	X-4035-976-1	BRACKET ASSY, MOUNTING	2-11
2	*	4-066-350-01	SHAFT (B), FIXED	
3	*	4-066-365-01	GUARD, EDGE	
4		3-618-078-00	RING, RETAINING, CE TYPE	
5		3-638-493-02	RING, RETAINING, CE	
6	*	4-066-363-01	DAMPER, GAS	
7		4-066-364-01	ROPE, WIRE	
8	*	4-066-351-01	SPRING, COMPRESSION	
9	*	4-066-349-02	SHAFT (A), FIXED	
10	*	4-066-362-01	PIN	
11	*	4-066-361-01	BRACKET, LOCK	
12		X-4035-975-1	HANDLE ASSY	
13	*	X-4035-977-2	BRACKET ASSY, WALL	
14		4-066-358-02	KNOB	

AF B

Section 7
Electrical Parts List

NOTE :

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

RESISTORS
- All resistors are in ohms.
- F: nonflammable
- METAL: Metal-film resistor
- METAL OXIDE: Metal oxide-film resistor

Ref.No.	Part No.	Description			Remark
	* A-1272-048-A	AF MOUNT			
		**********			
		<CAPACITOR>			
C6501	1-126-392-11	ELECT CHIP	100µF	20%	6.3V
C6502	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C6503	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
		<CONNECTOR>			
CN6501	* 1-564-520-11	PLUG, CONNECTOR 5P			
		<IC>			
IC6501	8-759-032-59	IC MC74HC595AF-T2			
IC6502	8-759-032-59	IC MC74HC595AF-T2			
IC6503	8-719-045-58	DIODE LB-602MA2			
		<RESISTOR>			
R6501	1-216-041-00	RES-CHIP	470	5%	1/10W
R6502	1-216-041-00	RES-CHIP	470	5%	1/10W
R6503	1-216-041-00	RES-CHIP	470	5%	1/10W
R6504	1-216-041-00	RES-CHIP	470	5%	1/10W
R6505	1-216-041-00	RES-CHIP	470	5%	1/10W
R6506	1-216-041-00	RES-CHIP	470	5%	1/10W
R6507	1-216-041-00	RES-CHIP	470	5%	1/10W
R6508	1-216-041-00	RES-CHIP	470	5%	1/10W
R6509	1-216-041-00	RES-CHIP	470	5%	1/10W
R6510	1-216-041-00	RES-CHIP	470	5%	1/10W
R6511	1-216-041-00	RES-CHIP	470	5%	1/10W
R6512	1-216-041-00	RES-CHIP	470	5%	1/10W
R6513	1-216-041-00	RES-CHIP	470	5%	1/10W
R6514	1-216-041-00	RES-CHIP	470	5%	1/10W
R6515	1-216-041-00	RES-CHIP	470	5%	1/10W
R6516	1-216-041-00	RES-CHIP	470	5%	1/10W

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Ref.No.	Part No.	Description			Remark
	* A-1136-120-A	B COMPL (PFM-500A3W)			
	* A-1136-118-A	B COMPL (PFM-510A2W)			
		**********			
	* 1-526-652-21	SOCKET, IC (DP) 8P			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
		<HOLDER, BATTERY>			
BAT500	1-550-104-11	HOLDER, BATTERY			
		<CAPACITOR>			
C1	1-126-934-11	ELECT	220µF	20%	16V
C2	1-126-934-11	ELECT	220µF	20%	16V
C3	1-126-934-11	ELECT	220µF	20%	16V
C4	1-126-934-11	ELECT	220µF	20%	16V
C6	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C8	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C10	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C12	1-126-934-11	ELECT	220µF	20%	16V
C13	1-104-664-11	ELECT	47µF	20%	16V
C14	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C15	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C16	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C18	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C19	1-126-934-11	ELECT	220µF	20%	16V
C20	1-126-934-11	ELECT	220µF	20%	16V
C21	1-126-934-11	ELECT	220µF	20%	16V
C23	1-126-934-11	ELECT	220µF	20%	16V
C24	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C25	1-126-934-11	ELECT	220µF	20%	16V
C26	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C27	1-126-934-11	ELECT	220µF	20%	16V
C100	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C101	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C102	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C103	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C104	1-115-566-11	CERAMIC CHIP	4.7µF	10%	10V
C105	1-115-566-11	CERAMIC CHIP	4.7µF	10%	10V
C106	1-115-566-11	CERAMIC CHIP	4.7µF	10%	10V

B

Ref.No.	Part No.	Description			Remark
C107	1-115-566-11	CERAMIC CHIP	4.7µF	10%	10V
C108	1-107-713-11	ELECT	4.7µF	20%	50V
C109	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C110	1-126-964-11	ELECT	10µF	20%	50V
C111	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C113	1-104-664-11	ELECT	47µF	20%	10V
C114	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C115	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C116	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C117	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C201	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C204	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C205	1-126-965-11	ELECT	22µF	20%	50V
C206	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C207	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C208	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C209	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C210	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C211	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C212	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C213	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C214	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C215	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C216	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C217	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C218	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C219	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C220	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C221	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C222	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C223	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C224	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C225	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C226	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C227	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C228	1-126-965-11	ELECT	22µF	20%	50V
C229	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C230	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C231	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C232	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C233	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C234	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C235	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C236	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C237	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C238	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C239	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C240	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C241	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C242	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C243	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C244	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C245	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C246	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C247	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C248	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C249	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C250	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C251	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C252	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C253	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C254	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C255	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C256	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C257	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

Ref.No.	Part No.	Description			Remark
C258	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C259	1-135-216-11	TANTAL. CHIP	10µF	20%	10V
C260	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C262	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C264	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C265	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C266	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C267	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C268	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C269	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C270	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C271	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C272	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C273	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C274	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C275	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C276	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C277	1-104-664-11	ELECT	47µF	20%	16V
C278	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C279	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C280	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C281	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C282	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C283	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C284	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C285	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C286	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C287	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C288	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C289	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C290	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C291	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C292	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C293	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C294	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C295	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C297	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C298	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C299	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C300	1-104-664-11	ELECT	47µF	20%	16V
C304	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C305	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C312	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C313	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C314	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C315	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C317	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C318	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C319	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C320	1-126-960-11	ELECT	1µF	20%	50V
C500	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C501	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C502	1-126-934-11	ELECT	220µF	20%	16V
C503	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C504	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C506	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C507	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C508	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C509	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C510	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C511	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C512	1-104-664-11	ELECT	47µF	20%	16V
C513	1-104-664-11	ELECT	47µF	20%	16V
C514	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C515	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

Ref.No.	Part No.	Description			Remark
C516	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C517	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C518	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C519	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C520	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C521	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C522	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C523	1-104-664-11	ELECT	47µF	20%	16V
C524	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C525	1-104-664-11	ELECT	47µF	20%	16V
C526	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C527	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C528	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C529	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C530	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C531	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C532	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C533	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C534	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C535	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C536	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C537	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C538	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C539	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C540	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C541	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C542	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C543	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C544	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C545	1-125-838-91	CERAMIC CHIP	2.2µF	10%	6.3V
C546	1-125-838-91	CERAMIC CHIP	2.2µF	10%	6.3V
C547	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C548	1-126-934-11	ELECT	220µF	20%	16V
C549	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C550	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C551	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C552	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C553	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C554	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C555	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C556	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C700	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C701	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C702	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C703	1-104-664-11	ELECT	47µF	20%	16V
C704	1-126-933-11	ELECT	100µF	20%	16V
C705	1-104-665-11	ELECT	100µF	20%	10V
C706	1-104-665-11	ELECT	100µF	20%	10V
C707	1-126-933-11	ELECT	100µF	20%	16V
C708	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C709	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C710	1-104-664-11	ELECT	47µF	20%	16V
C711	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C712	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C713	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C714	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C715	1-126-965-11	ELECT	22µF	20%	50V
C716	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C717	1-126-965-11	ELECT	22µF	20%	50V
C718	1-126-968-11	ELECT	100µF	20%	50V
C720	1-104-664-11	ELECT	47µF	20%	16V
C721	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C723	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C724	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C800	1-104-664-11	ELECT	47µF	20%	16V
C801	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C802	1-126-964-11	ELECT	10µF	20%	50V
C803	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C804	1-126-964-11	ELECT	10µF	20%	50V
C805	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C806	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C807	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C808	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C809	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C810	1-126-964-11	ELECT	10µF	20%	50V
C811	1-126-964-11	ELECT	10µF	20%	50V
C812	1-126-960-11	ELECT	1µF	20%	50V
C813	1-104-664-11	ELECT	47µF	20%	16V
C814	1-126-960-11	ELECT	1µF	20%	50V
C815	1-126-960-11	ELECT	1µF	20%	50V
C816	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C817	1-126-960-11	ELECT	1µF	20%	50V
C818	1-126-963-11	ELECT	4.7µF	20%	50V
C819	1-126-964-11	ELECT	10µF	20%	50V
C820	1-126-964-11	ELECT	10µF	20%	50V
C821	1-126-964-11	ELECT	10µF	20%	50V
C822	1-126-964-11	ELECT	10µF	20%	50V
C823	1-126-953-11	ELECT	2200µF	20%	35V
C824	1-107-909-11	ELECT	47µF	20%	35V
C825	1-126-964-11	ELECT	10µF	20%	50V
C826	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C827	1-126-964-11	ELECT	10µF	20%	50V
C828	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C829	1-126-947-11	ELECT	47µF	20%	35V
C830	1-126-947-11	ELECT	47µF	20%	35V
C831	1-126-947-11	ELECT	47µF	20%	35V
C832	1-126-964-11	ELECT	10µF	20%	50V
C833	1-126-953-11	ELECT	2200µF	20%	35V
C834	1-126-953-11	ELECT	2200µF	20%	35V
C835	1-136-165-00	MYLAR	0.1µF	5%	50V
C836	1-136-165-00	MYLAR	0.1µF	5%	50V
C837	1-104-664-11	ELECT	47µF	20%	16V
C838	1-104-664-11	ELECT	47µF	20%	16V
C1000	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1001	1-163-089-00	CERAMIC CHIP	6PF	0.50PF	50V
C1002	1-107-701-11	ELECT	47µF	20%	16V
C1003	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1004	1-107-701-11	ELECT	47µF	20%	16V
C1005	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1006	1-107-701-11	ELECT	47µF	20%	16V
C1007	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1008	1-104-664-11	ELECT	47µF	20%	25V
C1009	1-104-664-11	ELECT	47µF	20%	16V
C1010	1-104-664-11	ELECT	47µF	20%	16V
C1011	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1012	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1013	1-104-664-11	ELECT	47µF	20%	25V
C1014	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1015	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1016	1-126-960-11	ELECT	1µF	20%	50V
C1017	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1018	1-104-664-11	ELECT	47µF	20%	25V
C1019	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1020	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1021	1-104-664-11	ELECT	47µF	20%	16V
C1022	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1023	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1024	1-126-963-11	ELECT	4.7µF	20%	50V
C1025	1-104-664-11	ELECT	47µF	20%	16V
C1026	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

B

Ref.No.	Part No.	Description			Remark
C1027	1-107-716-11	ELECT	33µF	20%	16V
C1028	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1029	1-107-716-11	ELECT	33µF	20%	16V
C1030	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1031	1-126-964-11	ELECT	10µF	20%	50V
C1032	1-126-964-11	ELECT	10µF	20%	50V
C1033	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1034	1-104-664-11	ELECT	47µF	20%	16V
C1035	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1036	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1037	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1038	1-126-934-11	ELECT	220µF	20%	16V
C1039	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1040	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1041	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1042	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1043	1-126-960-11	ELECT	1µF	20%	50V
C1044	1-126-934-11	ELECT	220µF	20%	16V
C1045	1-164-346-11	CERAMIC CHIP	1µF		16V
C1046	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1047	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1048	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1049	1-104-664-11	ELECT	47µF	20%	16V
C1050	1-104-664-11	ELECT	47µF	20%	16V
C1051	1-104-664-11	ELECT	47µF	20%	16V
C1052	1-104-664-11	ELECT	47µF	20%	16V
C1053	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1055	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1056	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1057	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1058	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C1059	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1060	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1061	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C1062	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1063	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1064	1-104-665-11	ELECT	100µF	20%	10V
C1065	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C1066	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1067	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1068	1-104-664-11	ELECT	47µF	20%	16V
C1069	1-164-346-11	CERAMIC CHIP	1µF		16V
C1070	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1071	1-107-698-11	ELECT	10µF	20%	25V
C1072	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1073	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1074	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1075	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1076	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1077	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1078	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1079	1-104-664-11	ELECT	47µF	20%	16V
C1080	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1081	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1082	1-164-346-11	CERAMIC CHIP	1µF		16V
C1083	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1084	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1085	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1086	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1087	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1088	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1089	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1090	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1091	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1092	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

Ref.No.	Part No.	Description			Remark
C1093	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1094	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1095	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1096	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1097	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1098	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C1099	1-107-716-11	ELECT	33µF	20%	16V
C1100	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1101	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C1102	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1103	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C1104	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1105	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1106	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C1107	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1108	1-107-716-11	ELECT	33µF	20%	16V
C1109	1-126-960-11	ELECT	1µF	20%	50V
C1110	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1111	1-164-162-11	CERAMIC CHIP	100PF	2.00%	50V
C1112	1-126-960-11	ELECT	1µF	20%	50V
C1113	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1115	1-104-664-11	ELECT	47µF	20%	16V
C1116	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1117	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1118	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1119	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1120	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1121	1-107-716-11	ELECT	33µF	20%	16V
C1122	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1123	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1124	1-104-664-11	ELECT	47µF	20%	16V
C1125	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1126	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1127	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C1128	1-164-344-11	CERAMIC CHIP	0.068µF	10%	25V
C1129	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1130	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C1131	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1132	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1133	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1134	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1135	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1136	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1137	1-104-664-11	ELECT	47µF	20%	10V
C1138	1-104-664-11	ELECT	47µF	20%	16V
C1139	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1140	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1141	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1142	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1143	1-104-664-11	ELECT	47µF	20%	16V
C1144	1-104-664-11	ELECT	47µF	20%	16V
C1145	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1146	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1147	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1148	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1149	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1150	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1151	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1152	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1153	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1154	1-104-664-11	ELECT	47µF	20%	16V
C1155	1-126-964-11	ELECT	10µF	20%	50V
C1156	1-126-964-11	ELECT	10µF	20%	50V
C1157	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1158	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

Ref.No.	Part No.	Description			Remark
C1159	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1160	1-104-664-11	ELECT	47µF	20%	16V
C1161	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1162	1-126-964-11	ELECT	10µF	20%	50V
C1164	1-104-665-11	ELECT	100µF	20%	10V
C1165	1-126-964-11	ELECT	10µF	20%	50V
C1168	1-126-964-11	ELECT	10µF	20%	50V
C1169	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1170	1-104-664-11	ELECT	47µF	20%	16V
C1171	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1172	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1173	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1174	1-104-664-11	ELECT	47µF	20%	16V
C1175	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1176	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1179	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1183	1-126-964-11	ELECT	10µF	20%	50V
C1184	1-104-665-11	ELECT	100µF	20%	10V
C1185	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1186	1-104-664-11	ELECT	47µF	20%	16V
C1187	1-104-664-11	ELECT	47µF	20%	16V
C1189	1-104-664-11	ELECT	47µF	20%	16V
C1190	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1191	1-104-664-11	ELECT	47µF	20%	16V
C1192	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1193	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1194	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1195	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1196	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1197	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1198	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1199	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1200	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1201	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1202	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1203	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1204	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1205	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1206	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1207	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1208	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1209	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1210	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1211	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1212	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1213	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1214	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1215	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1216	1-104-665-11	ELECT	100µF	20%	10V
C1217	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1218	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1219	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1220	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1221	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1222	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1223	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1224	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1225	1-104-664-11	ELECT	47µF	20%	16V
C1226	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1227	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1228	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1229	1-104-664-11	ELECT	47µF	20%	16V
C1230	1-126-963-11	ELECT	4.7µF	20%	50V
C1231	1-104-664-11	ELECT	47µF	20%	16V
C1232	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1233	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1234	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1235	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1236	1-104-664-11	ELECT	47µF	20%	16V
C1237	1-104-664-11	ELECT	47µF	20%	16V
C1238	1-104-664-11	ELECT	47µF	20%	16V
C1239	1-126-964-11	ELECT	10µF	20%	50V
C1240	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1241	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1242	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1243	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1244	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1245	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1246	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1247	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1248	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1249	1-126-964-11	ELECT	10µF	20%	50V
C1250	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1251	1-104-664-11	ELECT	47µF	20%	16V
C1252	1-104-664-11	ELECT	47µF	20%	16V
C1261	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1262	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1263	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1264	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1265	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1266	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1267	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1268	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1269	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1270	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1271	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1278	1-104-665-11	ELECT	100µF	20%	10V
C2000	1-126-963-11	ELECT	4.7µF	20%	50V
C2001	1-126-963-11	ELECT	4.7µF	20%	50V
C2002	1-126-963-11	ELECT	4.7µF	20%	50V
C2003	1-126-963-11	ELECT	4.7µF	20%	50V
C2004	1-126-963-11	ELECT	4.7µF	20%	50V
C2005	1-126-963-11	ELECT	4.7µF	20%	50V
C2100	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2101	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2102	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2103	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2104	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2105	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2106	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2107	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2108	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2109	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2110	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2111	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2112	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2200	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C2201	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C2202	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C2203	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C2204	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C2300	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2301	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2302	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2303	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2304	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2305	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2306	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2400	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C2401	1-163-025-11	CERAMIC CHIP	0.001µF		50V

B

Ref.No.	Part No.	Description			Remark
C2402	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C2403	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C2404	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C2405	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C2500	1-163-235-11	CERAMIC CHIP	22PF	2.00%	50V
C2600	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C2601	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C2602	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C2700	1-126-967-11	ELECT	47µF	20%	50V
C2701	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C2702	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4000	1-126-964-11	ELECT	10µF	20%	50V
C4001	1-126-934-11	ELECT	220µF	20%	10V
C4002	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4003	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C4004	1-126-964-11	ELECT	10µF	20%	50V
C4005	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4006	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4007	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4008	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4009	1-126-964-11	ELECT	10µF	20%	50V
C4010	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4011	1-126-964-11	ELECT	10µF	20%	50V
C4012	1-126-964-11	ELECT	10µF	20%	50V
C4013	1-126-964-11	ELECT	10µF	20%	50V
C4014	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4015	1-126-934-11	ELECT	220µF	20%	10V
C4016	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4017	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C4018	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C4019	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4020	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4021	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4022	1-126-934-11	ELECT	220µF	20%	10V
C4023	1-126-934-11	ELECT	220µF	20%	10V
C4024	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C4025	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4026	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4027	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4028	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C4029	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C4030	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C4031	1-124-442-00	ELECT	330µF	20%	6.3V
C4032	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4033	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4034	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4035	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4036	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C4037	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C4038	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C4039	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4040	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C4041	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4042	1-126-964-11	ELECT	10µF	20%	50V
C4043	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4044	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4045	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C4046	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4047	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4048	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4049	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4050	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4051	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4052	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4053	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4054	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4055	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C4056	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4057	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4058	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4059	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C4060	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4061	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V
C4062	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C4063	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C4064	1-104-664-11	ELECT	47µF	20%	16V
C4065	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4066	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4067	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4068	1-107-713-11	ELECT	4.7µF	20%	50V
C4069	1-104-664-11	ELECT	47µF	20%	16V
C4070	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C4071	1-126-961-11	ELECT	2.2µF	20%	50V
C4072	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4073	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4074	1-126-960-11	ELECT	1µF	20%	50V
C4075	1-104-664-11	ELECT	47µF	20%	16V
C4076	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4077	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4078	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V
C4079	1-104-664-11	ELECT	47µF	20%	16V
C4080	1-104-664-11	ELECT	47µF	20%	16V
C4081	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4082	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4083	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4084	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4085	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4086	1-126-963-11	ELECT	4.7µF	20%	50V
C4088	1-126-959-11	ELECT	0.47µF	20%	50V
C4089	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4090	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4091	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4092	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C4093	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4094	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4095	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C4096	1-126-963-11	ELECT	4.7µF	20%	50V
C4097	1-163-145-00	CERAMIC CHIP	0.0015µF	5%	50V
C4098	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4099	1-104-664-11	ELECT	47µF	20%	16V
C4100	1-126-933-11	ELECT	100µF	20%	16V
C4103	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4104	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4105	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C4106	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4107	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C4108	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C4109	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C4110	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4111	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C4112	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

<CONNECTOR>

CN3	*	1-794-540-11	HEADER, CONNECTOR(PC BOARD) 80 (PFM-500A3W)
CN3	*	1-793-268-11	HEADER, CONNECTOR(PC BOARD) 80 (PFM-510A2W)
CN4		1-506-474-11	PIN, CONNECTOR 9P
CN5		1-506-468-11	PIN, CONNECTOR 3P
CN6		1-506-476-11	PIN, CONNECTOR 11P

Ref.No.	Part No.	Description	Remark
CN7	1-506-468-11	PIN, CONNECTOR 3P	
CN8	* 1-506-477-11	PIN, CONNECTOR 12P	
CN9	1-506-474-11	PIN, CONNECTOR 9P	
CN10	* 1-506-475-11	PIN, CONNECTOR 10P	
CN12	1-506-480-11	PIN, CONNECTOR 15P	
CN13	1-506-469-11	PIN, CONNECTOR 4P	
CN14	1-506-474-11	PIN, CONNECTOR 9P	
CN15	1-506-473-11	PIN, CONNECTOR 8P	
CN16	1-774-530-11	CONNECTOR, BOARD TO BOARD 5P	
CN17	1-774-530-11	CONNECTOR, BOARD TO BOARD 5P	
CN18	1-506-468-11	PIN, CONNECTOR 3P	
CN19	1-506-468-11	PIN, CONNECTOR 3P	
	<DIODE>		
D1	8-719-073-01	DIODE MA111-TX	
D100	8-719-914-43	DIODE DAN202K-T-146	
D101	8-719-158-49	DIODE UDZ-TE-17-12B	
D102	8-719-158-49	DIODE UDZ-TE-17-12B	
D201	8-719-073-01	DIODE MA111-TX	
D504	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D505	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D506	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D507	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D508	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D509	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D510	8-719-073-01	DIODE MA111-TX	
D511	8-719-073-01	DIODE MA111-TX	
D512	8-719-073-01	DIODE MA111-TX	
D513	8-719-073-01	DIODE MA111-TX	
D514	8-719-073-01	DIODE MA111-TX	
D700	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D701	8-719-073-01	DIODE MA111-TX	
D702	8-719-059-22	DIODE NSQ03A06-TE16L	
D703	8-719-073-01	DIODE MA111-TX	
D704	8-719-073-01	DIODE MA111-TX	
D705	8-719-073-01	DIODE MA111-TX	
D800	8-719-073-01	DIODE MA111-TX	
D801	8-719-057-00	DIODE UDZ-TE-17-36B	
D802	8-719-510-48	DIODE D1N20R-TR	
D803	8-719-510-48	DIODE D1N20R-TR	
D1000	8-719-800-76	DIODE MA157-TX	
D1001	8-719-800-76	DIODE MA157-TX	
D1002	8-719-800-76	DIODE MA157-TX	
D1003	8-719-073-01	DIODE MA111-TX	
D1004	8-719-073-01	DIODE MA111-TX	
D1005	8-719-988-61	DIODE 1SS355TE-17	
D1006	8-719-073-01	DIODE MA111-TX	
D1007	8-719-422-12	DIODE UDZ-TE-17-3.9B	
D4000	8-719-073-01	DIODE MA111-TX	
D4001	8-719-073-01	DIODE MA111-TX	
D4002	8-719-914-43	DIODE DAN202K-T-146	
D4003	8-719-914-43	DIODE DAN202K-T-146	
D4004	8-719-073-01	DIODE MA111-TX	
D4005	8-719-914-43	DIODE DAN202K-T-146	
D4006	8-719-031-68	DIODE HVU359TRF	
D4007	8-719-031-68	DIODE HVU359TRF	
	<FERRITE BEAD>		
FB101	1-414-234-22	INDUCTOR CHIP 0µH	
FB200	1-414-234-22	INDUCTOR CHIP 0µH	
FB201	1-414-234-22	INDUCTOR CHIP 0µH	
FB202	1-414-234-22	INDUCTOR CHIP 0µH	
FB203	1-414-234-22	INDUCTOR CHIP 0µH	
FB204	1-414-234-22	INDUCTOR CHIP 0µH	
FB205	1-414-234-22	INDUCTOR CHIP 0µH	
FB700	1-410-396-41	FERRITE 0.45µH	
FB701	1-414-230-22	INDUCTOR CHIP 0µH	
	<FILTER>		
FL1000	1-414-234-22	INDUCTOR CHIP 0µH	
FL1001	1-414-234-22	INDUCTOR CHIP 0µH	
FL1002	1-543-775-11	FERRITE 0µH	
FL1003	1-543-775-11	FERRITE 0µH	
FL1004	1-239-847-11	FILTER, LOW PASS	
FL1005	1-233-505-21	FILTER, LOW PASS	
FL1006	1-233-504-21	FILTER, LOW PASS	
FL1007	1-233-504-21	FILTER, LOW PASS	
FL4000	1-233-736-21	FILTER, EMI	
FL4001	1-233-736-21	FILTER, EMI	
FL4002	1-233-736-21	FILTER, EMI	
FL4003	1-233-434-11	FILTER, LOW PASS	
FL4004	1-233-736-21	FILTER, EMI	
FL4005	1-233-736-21	FILTER, EMI	
FL4006	1-233-434-11	FILTER, LOW PASS	
FL4007	1-233-505-21	FILTER, LOW PASS	
FL4008	1-233-504-21	FILTER, LOW PASS	
FL4009	1-233-504-21	FILTER, LOW PASS	
	<IC>		
IC1	8-759-460-72	IC BA033FP-E2	
IC2	8-759-003-17	IC LM317T	
IC3	8-759-460-72	IC BA033FP-E2	
IC4	8-759-390-57	IC LM2940CT-5.0	
IC6	8-759-267-25	IC LM2940CT-9.0	
IC7	8-759-460-72	IC BA033FP-E2	
IC100	8-759-011-65	IC TC74HC4053AF(EL)	
IC101	8-759-646-02	IC M52347FP-TE	
IC102	8-759-475-21	IC TC74LCX244F(EL)	
IC103	8-759-442-20	IC 24LC21T/SN	
IC200	8-759-645-12	IC AD9884AKS-140	
IC202	8-759-481-73	IC SN74LVC125APWR	
IC204	8-759-362-35	IC ICS9161A-01CW16T	
IC205	8-759-575-71	IC M24C04-WMN6T	
IC206	8-759-669-11	IC MBM29LV400TC-70PFTN-SV9695	
IC207	8-759-646-32	IC PW164-20WK	
IC208	8-759-652-59	IC EPFQC240AA	
IC209	8-759-475-21	IC TC74LCX244F(EL)	
IC210	8-759-491-51	IC TC74VHCT245AFT(EL)	
IC211	8-759-491-51	IC TC74VHCT245AFT(EL)	
IC212	8-759-491-51	IC TC74VHCT245AFT(EL)	
IC213	8-759-491-51	IC TC74VHCT245AFT(EL)	
IC214	8-759-599-99	IC MB90096PF-G-182-BND-ER	
IC215	8-759-491-51	IC TC74VHCT245AFT(EL)	
IC216	8-759-680-78	IC EPC1PC8-9692V1.00 (PFM-500A3W)	
IC216	8-759-668-72	IC EPC1PC8-9695V1.00 (PFM-510A2W)	
IC218	8-759-646-15	IC ST49C101ACF8-05-TR	
IC219	8-759-058-62	IC TC7S08FU(TE85R)	
IC220	8-759-008-45	IC MC74HC4538AF-T1 (PFM-500A3W)	
IC220	8-759-239-34	IC TC74HC4538AF(EL) (PFM-510A2W)	
IC221	8-759-439-67	IC TC7W126FU(TE12R)	
IC222	8-759-491-32	IC TC74VHCT04AF(EL)	
IC223	8-759-058-58	IC TC7S04FU(TE85R)	
IC224	8-759-011-65	IC TC74HC4053AF(EL)	
IC500	8-759-232-46	IC TC74HC126AF(EL)	

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Ref.No.	Part No.	Description	Remark
IC501	8-759-635-27	IC M62352GP-75ED	
IC502	8-759-475-21	IC TC74LCX244F(EL)	
IC503	8-759-252-59	IC MAX202CSE-T	
IC504	8-759-560-17	IC RS5C348A-E2	
IC505	8-759-232-46	IC TC74HC126AF(EL)	
IC506	8-759-232-44	IC TC74HC125AF(EL)	
IC507	8-759-233-73	IC TC74HCT244AF(EL)	
IC508	8-759-186-30	IC TC74VHC14F(EL)	
IC509	8-759-648-10	IC HD64F2633TE	
IC510	8-759-058-62	IC TC7S08FU(TE85R)	
IC511	8-759-492-55	IC M24C64-WMN6T	
IC512	8-759-582-91	IC S-80842ANNP-ED6-T2	
IC513	8-759-582-91	IC S-80842ANNP-ED6-T2	
IC700	8-759-058-62	IC TC7S08FU(TE85R)	
IC701	8-759-058-62	IC TC7S08FU(TE85R)	
IC702	8-759-058-62	IC TC7S08FU(TE85R)	
IC703	8-759-981-65	IC NJM2903M-T2	
IC704	8-759-058-62	IC TC7S08FU(TE85R)	
IC705	8-759-058-62	IC TC7S08FU(TE85R)	
IC800	8-759-346-93	IC TA8184F(EL)	
IC801	8-759-246-70	IC TA8216H	
IC1000	8-752-053-21	IC CXA1211M-T4	
IC1001	8-752-053-21	IC CXA1211M-T4	
IC1002	8-759-011-65	IC TC74HC4053AF(EL)	
IC1003	8-759-011-65	IC TC74HC4053AF(EL)	
IC1004	8-759-082-61	IC TC4W53FU(TE12R)	
IC1005	8-752-053-21	IC CXA1211M-T4	
IC1006	8-759-987-27	IC LM1881MX	
IC1007	8-759-568-27	IC MSM514265C-60JSDR1	
IC1008	8-759-460-72	IC BA033FP-E2	
IC1009	8-759-460-72	IC BA033FP-E2	
IC1010	8-759-031-84	IC TC7S04F(TE85R)	
IC1011	8-759-594-44	IC UPD64082GF-3BA	
IC1012	8-759-031-84	IC TC7S04F(TE85R)	
IC1014	8-759-635-27	IC M62352GP-75ED	
IC1027	8-759-970-89	IC BA10358F-T2	
IC1028	8-759-970-89	IC BA10358F-T2	
IC1029	8-759-970-89	IC BA10358F-T2	
IC1030	8-752-067-05	IC CXA1739S	
IC1031	8-759-011-65	IC TC74HC4053AF(EL)	
IC1032	8-759-328-12	IC Z8622812PSC	
IC1033	8-759-390-57	IC LM2940CT-5.0	
IC1034	8-759-390-38	IC LM2940CT-12FL91	
IC1035	8-752-082-49	IC CXA2119M-T6	
IC1036	8-749-015-18	IC PQ07VZ012P	
IC1037	8-759-430-32	IC TLC2933IPWR	
IC1039	8-759-573-19	IC MSM56V16160D-10TS-K	
IC1040	8-752-398-47	IC CXD2090Q	
IC1041	8-759-295-09	IC TLC2932IPW-E20	
IC1042	8-759-447-90	IC TLC5733AIPM	
IC1043	8-759-528-48	IC NJU7032M-TE2	
IC1044	8-759-082-61	IC TC4W53FU(TE12R)	
IC2000	8-759-661-00	IC ISPLSI2192VE-100LT128	
IC2001	8-759-660-42	IC THC63LVDF84A-T	
IC2002	8-759-475-21	IC TC74LCX244F(EL)	
IC2010	8-759-460-72	IC BA033FP-E2	
IC2011	8-759-460-72	IC BA033FP-E2	
IC4000	8-759-430-79	IC TDA8395T/N3	
IC4001	8-752-070-58	IC CXA1860Q-T4	
IC4003	8-752-352-09	IC CXD2300Q-T4	
IC4004	8-752-369-15	IC CXD2030R	
IC4005	8-759-011-65	IC TC74HC4053AF(EL)	
IC4006	8-752-369-84	IC CXD2309Q-T6	
IC4007	8-759-296-53	IC UPC1862GS-E2	
IC4008	8-759-239-55	IC TC74HC123AF(EL)	
IC4009	8-759-239-55	IC TC74HC123AF(EL)	
IC4010	8-759-235-14	IC TC74HC04AF-TP2	
IC4011	8-759-239-55	IC TC74HC123AF(EL)	
IC4012	8-759-232-65	IC TC74HC157AF(EL)	

<COIL>

L200	1-414-752-11	INDUCTOR	2.2µH
L700	1-410-482-31	INDUCTOR	100µH
L701	1-406-666-21	INDUCTOR	150µH
L702	1-406-666-21	INDUCTOR	150µH
L704	1-410-671-31	INDUCTOR	47µH
L800	1-408-615-31	INDUCTOR	100µH
L1001	1-410-200-31	INDUCTOR CHIP	4.7µH
L1002	1-414-042-21	INDUCTOR	18µH
L1003	1-410-210-21	INDUCTOR CHIP	33µH
L1004	1-414-754-11	INDUCTOR	10µH
L1005	1-414-754-11	INDUCTOR	10µH
L1006	1-414-757-11	INDUCTOR	100µH
L1007	1-412-052-21	INDUCTOR CHIP	1µH
L1008	1-414-757-11	INDUCTOR	100µH
L1009	1-414-754-11	INDUCTOR	10µH
L1010	1-414-754-11	INDUCTOR	10µH
L1011	1-410-663-31	INDUCTOR	10µH
L1012	1-414-754-11	INDUCTOR	10µH
L1013	1-414-757-11	INDUCTOR	100µH
L1014	1-414-757-11	INDUCTOR	100µH
L1015	1-414-757-11	INDUCTOR	100µH
L1016	1-414-754-11	INDUCTOR	10µH
L1017	1-414-754-11	INDUCTOR	10µH
L1018	1-414-754-11	INDUCTOR	10µH
L2000	1-414-754-11	INDUCTOR	10µH
L4000	1-408-595-31	INDUCTOR	2.2µH
L4001	1-408-591-11	INDUCTOR	1µH
L4002	1-408-595-31	INDUCTOR	2.2µH
L4003	1-408-595-31	INDUCTOR	2.2µH
L4004	1-408-595-31	INDUCTOR	2.2µH
L4005	1-408-591-11	INDUCTOR	1µH
L4006	1-414-248-11	INDUCTOR	2.2µH
L4007	1-414-248-11	INDUCTOR	2.2µH
L4008	1-408-591-11	INDUCTOR	1µH
L4009	1-410-193-51	INDUCTOR CHIP	1.2µH
L4010	1-410-193-51	INDUCTOR CHIP	1.2µH
L4011	1-410-193-51	INDUCTOR CHIP	1.2µH
L4012	1-410-193-51	INDUCTOR CHIP	1.2µH
L4013	1-410-193-51	INDUCTOR CHIP	1.2µH
L4014	1-410-193-51	INDUCTOR CHIP	1.2µH
L4017	1-410-193-51	INDUCTOR CHIP	1.2µH

<TRANSISTOR>

Q100	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q
Q101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q
Q102	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR
Q103	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q
Q104	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q
Q200	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR
Q201	1-801-806-11	TRANSISTOR DTC144EKA-T146
Q202	1-801-806-11	TRANSISTOR DTC144EKA-T146
Q203	8-729-027-38	TRANSISTOR DTA144EKA-T146
Q502	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q
Q503	8-729-101-07	TRANSISTOR 2SA1213Y-TE12L
Q700	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR
Q701	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q
Q702	8-729-041-37	TRANSISTOR 2SJ377(TE16L)
Q800	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q

Ref.No.	Part No.	Description	Remark
Q801	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q802	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q803	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q804	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1000	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1002	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1003	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1004	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1005	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1006	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1007	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1008	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1009	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1010	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1011	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1012	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1013	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1014	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1015	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1016	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1017	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1018	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1019	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1020	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1021	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1022	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1023	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1024	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1025	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1026	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1027	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1028	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1029	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1030	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1031	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1032	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1033	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1034	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1035	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1036	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1037	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1038	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1039	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1040	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1041	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1042	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1043	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1044	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1045	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1046	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1047	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1048	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1049	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1050	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1051	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1052	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1053	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1054	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1055	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1056	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1057	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1058	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q1059	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1060	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1061	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1062	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1063	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1064	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q1065	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1066	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4000	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4001	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4002	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4003	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q4004	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q4005	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4006	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q4007	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4008	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4009	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4010	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4011	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4012	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4013	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4014	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4015	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4016	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4017	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4018	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4019	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q4020	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4021	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4022	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4023	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q4024	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4025	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q4026	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q4027	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q4028	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q4029	8-729-120-28	TRANSISTOR 2SC2412K-T-146-Q	
Q4030	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4031	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4032	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4033	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4034	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4035	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q4036	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q4037	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q4038	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q4039	1-801-806-11	TRANSISTOR DTC144EKA-T146	

<RESISTOR>

R1	1-216-341-11	METAL OXIDE	0.22	5%	1W
R3	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R4	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5	1-215-880-00	METAL OXIDE	10	5%	2W
R100	1-216-041-00	RES-CHIP	470	5%	1/10W
R101	1-216-041-00	RES-CHIP	470	5%	1/10W
R102	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R103	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R104	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R105	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R106	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R107	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R108	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R109	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R110	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W

B

Ref.No.	Part No.	Description			Remark
R111	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R112	1-216-017-91	RES-CHIP	47	5%	1/10W
R114	1-216-017-91	RES-CHIP	47	5%	1/10W
R115	1-216-017-91	RES-CHIP	47	5%	1/10W
R116	1-216-089-91	RES-CHIP	47K	5%	1/10W
R117	1-216-017-91	RES-CHIP	47	5%	1/10W
R204	1-216-001-00	RES-CHIP	10	5%	1/10W
R205	1-216-001-00	RES-CHIP	10	5%	1/10W
R206	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R207	1-216-295-91	SHORT	0		
R208	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R211	1-216-073-00	RES-CHIP	10K	5%	1/10W
R212	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R213	1-216-073-00	RES-CHIP	10K	5%	1/10W
R214	1-216-009-91	RES-CHIP	22	5%	1/10W
R216	1-216-009-91	RES-CHIP	22	5%	1/10W
R217	1-216-017-91	RES-CHIP	47	5%	1/10W
R218	1-216-017-91	RES-CHIP	47	5%	1/10W
R219	1-216-295-91	SHORT	0		
R220	1-216-017-91	RES-CHIP	47	5%	1/10W
R221	1-216-295-91	SHORT	0		
R222	1-216-017-91	RES-CHIP	47	5%	1/10W
R223	1-216-017-91	RES-CHIP	47	5%	1/10W
R224	1-216-017-91	RES-CHIP	47	5%	1/10W
R225	1-216-017-91	RES-CHIP	47	5%	1/10W
R226	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R230	1-216-067-00	RES-CHIP	5.6K	5%	1/10W (PFM-510A2W)
R231	1-216-073-00	RES-CHIP	10K	5%	1/10W
R232	1-216-073-00	RES-CHIP	10K	5%	1/10W
R233	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R234	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R235	1-216-049-91	RES-CHIP	1K	5%	1/10W
R236	1-216-049-91	RES-CHIP	1K	5%	1/10W
R238	1-216-295-91	SHORT	0		
R239	1-216-295-91	SHORT	0		
R240	1-216-295-91	SHORT	0		
R244	1-216-295-91	SHORT	0		
R245	1-216-295-91	SHORT	0		
R246	1-216-295-91	SHORT	0		
R248	1-216-295-91	SHORT	0		
R249	1-216-295-91	SHORT	0		
R250	1-216-295-91	SHORT	0		
R251	1-216-295-91	SHORT	0		
R252	1-216-295-91	SHORT	0		
R253	1-216-295-91	SHORT	0		
R254	1-216-295-91	SHORT	0		
R255	1-216-295-91	SHORT	0		
R256	1-216-295-91	SHORT	0		
R257	1-216-073-00	RES-CHIP	10K	5%	1/10W
R258	1-216-073-00	RES-CHIP	10K	5%	1/10W
R259	1-216-073-00	RES-CHIP	10K	5%	1/10W
R263	1-216-681-11	METAL CHIP	18K	0.50%	1/10W (PFM-510A2W)
R269	1-216-295-91	SHORT	0 (PFM-510A2W)		
R270	1-216-295-91	SHORT	0 (PFM-510A2W)		
R271	1-216-295-91	SHORT	0 (PFM-510A2W)		
R272	1-216-295-91	SHORT	0 (PFM-510A2W)		
R273	1-216-295-91	SHORT	0 (PFM-500A3W)		
R274	1-216-295-91	SHORT	0 (PFM-510A2W)		
R275	1-216-295-91	SHORT	0 (PFM-510A2W)		
R276	1-216-295-91	SHORT	0 (PFM-510A2W)		
R277	1-216-295-91	SHORT	0		
R278	1-216-295-91	SHORT	0 (PFM-510A2W)		
R279	1-216-295-91	SHORT	0 (PFM-500A3W)		
R280	1-216-295-91	SHORT	0 (PFM-500A3W)		
R281	1-216-295-91	SHORT	0 (PFM-510A2W)		

Ref.No.	Part No.	Description			Remark
R282	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R283	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R284	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R290	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R291	1-216-025-91	RES-CHIP	100	5%	1/10W
R292	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R293	1-216-017-91	RES-CHIP	47	5%	1/10W
R294	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R295	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R296	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R297	1-216-049-91	RES-CHIP	1K	5%	1/10W
R437	1-216-037-00	RES-CHIP	330	5%	1/10W
R438	1-216-037-00	RES-CHIP	330	5%	1/10W
R439	1-216-037-00	RES-CHIP	330	5%	1/10W
R440	1-216-029-00	RES-CHIP	150	5%	1/10W
R441	1-216-029-00	RES-CHIP	150	5%	1/10W
R442	1-216-029-00	RES-CHIP	150	5%	1/10W
R443	1-216-025-91	RES-CHIP	100	5%	1/10W
R444	1-216-025-91	RES-CHIP	100	5%	1/10W
R445	1-216-025-91	RES-CHIP	100	5%	1/10W
R446	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R447	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R448	1-216-045-00	RES-CHIP	680	5%	1/10W
R449	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R450	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R451	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R452	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R453	1-216-295-91	SHORT	0		
R456	1-216-295-91	SHORT	0		
R500	1-216-025-91	RES-CHIP	100	5%	1/10W
R501	1-216-025-91	RES-CHIP	100	5%	1/10W
R502	1-216-001-00	RES-CHIP	10	5%	1/10W
R503	1-216-001-00	RES-CHIP	10	5%	1/10W
R504	1-216-001-00	RES-CHIP	10	5%	1/10W
R505	1-216-001-00	RES-CHIP	10	5%	1/10W
R506	1-216-001-00	RES-CHIP	10	5%	1/10W
R507	1-216-001-00	RES-CHIP	10	5%	1/10W
R508	1-216-001-00	RES-CHIP	10	5%	1/10W
R509	1-216-001-00	RES-CHIP	10	5%	1/10W
R510	1-216-001-00	RES-CHIP	10	5%	1/10W
R511	1-216-001-00	RES-CHIP	10	5%	1/10W
R512	1-216-001-00	RES-CHIP	10	5%	1/10W
R513	1-216-001-00	RES-CHIP	10	5%	1/10W
R514	1-216-001-00	RES-CHIP	10	5%	1/10W
R515	1-216-031-00	RES-CHIP	180	5%	1/10W
R516	1-216-025-91	RES-CHIP	100	5%	1/10W
R517	1-216-025-91	RES-CHIP	100	5%	1/10W
R518	1-216-001-00	RES-CHIP	10	5%	1/10W
R519	1-216-001-00	RES-CHIP	10	5%	1/10W
R520	1-216-073-00	RES-CHIP	10K	5%	1/10W
R521	1-216-049-91	RES-CHIP	1K	5%	1/10W
R525	1-216-049-91	RES-CHIP	1K	5%	1/10W
R526	1-216-025-91	RES-CHIP	100	5%	1/10W
R527	1-216-025-91	RES-CHIP	100	5%	1/10W
R528	1-216-073-00	RES-CHIP	10K	5%	1/10W
R529	1-216-073-00	RES-CHIP	10K	5%	1/10W
R530	1-216-073-00	RES-CHIP	10K	5%	1/10W
R531	1-216-025-91	RES-CHIP	100	5%	1/10W
R532	1-216-073-00	RES-CHIP	10K	5%	1/10W
R533	1-216-097-91	RES-CHIP	100K	5%	1/10W
R534	1-216-025-91	RES-CHIP	100	5%	1/10W
R535	1-216-025-91	RES-CHIP	100	5%	1/10W
R536	1-216-017-91	RES-CHIP	47	5%	1/10W
R537	1-216-017-91	RES-CHIP	47	5%	1/10W
R538	1-216-017-91	RES-CHIP	47	5%	1/10W

Ref.No.	Part No.	Description			Remark
R539	1-216-097-91	RES-CHIP	100K	5%	1/10W
R540	1-216-073-00	RES-CHIP	10K	5%	1/10W
R541	1-216-073-00	RES-CHIP	10K	5%	1/10W
R542	1-216-073-00	RES-CHIP	10K	5%	1/10W
R543	1-216-025-91	RES-CHIP	100	5%	1/10W
R544	1-216-025-91	RES-CHIP	100	5%	1/10W
R545	1-216-025-91	RES-CHIP	100	5%	1/10W
R546	1-216-025-91	RES-CHIP	100	5%	1/10W
R547	1-216-025-91	RES-CHIP	100	5%	1/10W
R548	1-216-025-91	RES-CHIP	100	5%	1/10W
R549	1-216-025-91	RES-CHIP	100	5%	1/10W
R550	1-216-009-91	RES-CHIP	22	5%	1/10W
R551	1-216-025-91	RES-CHIP	100	5%	1/10W
R552	1-216-073-00	RES-CHIP	10K	5%	1/10W
R553	1-216-025-91	RES-CHIP	100	5%	1/10W
R554	1-216-025-91	RES-CHIP	100	5%	1/10W
R555	1-216-025-91	RES-CHIP	100	5%	1/10W
R556	1-216-073-00	RES-CHIP	10K	5%	1/10W
R557	1-216-025-91	RES-CHIP	100	5%	1/10W
R558	1-216-025-91	RES-CHIP	100	5%	1/10W
R559	1-216-025-91	RES-CHIP	100	5%	1/10W
R560	1-216-025-91	RES-CHIP	100	5%	1/10W
R561	1-216-025-91	RES-CHIP	100	5%	1/10W
R562	1-216-025-91	RES-CHIP	100	5%	1/10W
R563	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R564	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R565	1-216-025-91	RES-CHIP	100	5%	1/10W
R566	1-216-025-91	RES-CHIP	100	5%	1/10W
R567	1-216-025-91	RES-CHIP	100	5%	1/10W
R568	1-216-025-91	RES-CHIP	100	5%	1/10W
R569	1-216-025-91	RES-CHIP	100	5%	1/10W
R570	1-216-025-91	RES-CHIP	100	5%	1/10W
R571	1-216-025-91	RES-CHIP	100	5%	1/10W
R572	1-216-025-91	RES-CHIP	100	5%	1/10W
R573	1-216-025-91	RES-CHIP	100	5%	1/10W
R574	1-216-025-91	RES-CHIP	100	5%	1/10W
R575	1-216-025-91	RES-CHIP	100	5%	1/10W
R576	1-216-025-91	RES-CHIP	100	5%	1/10W
R577	1-216-025-91	RES-CHIP	100	5%	1/10W
R578	1-216-017-91	RES-CHIP	47	5%	1/10W
R579	1-216-017-91	RES-CHIP	47	5%	1/10W
R580	1-216-025-91	RES-CHIP	100	5%	1/10W
R581	1-216-025-91	RES-CHIP	100	5%	1/10W
R582	1-216-025-91	RES-CHIP	100	5%	1/10W
R583	1-216-025-91	RES-CHIP	100	5%	1/10W
R584	1-216-025-91	RES-CHIP	100	5%	1/10W
R585	1-216-025-91	RES-CHIP	100	5%	1/10W
R586	1-216-025-91	RES-CHIP	100	5%	1/10W
R587	1-216-025-91	RES-CHIP	100	5%	1/10W
R588	1-216-025-91	RES-CHIP	100	5%	1/10W
R589	1-216-025-91	RES-CHIP	100	5%	1/10W
R590	1-216-025-91	RES-CHIP	100	5%	1/10W
R591	1-216-025-91	RES-CHIP	100	5%	1/10W
R592	1-216-025-91	RES-CHIP	100	5%	1/10W
R593	1-216-025-91	RES-CHIP	100	5%	1/10W
R594	1-216-025-91	RES-CHIP	100	5%	1/10W
R595	1-216-025-91	RES-CHIP	100	5%	1/10W
R596	1-216-025-91	RES-CHIP	100	5%	1/10W
R597	1-216-025-91	RES-CHIP	100	5%	1/10W
R598	1-216-017-91	RES-CHIP	47	5%	1/10W
R599	1-216-089-91	RES-CHIP	47K	5%	1/10W
R600	1-216-001-00	RES-CHIP	10	5%	1/10W
R601	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R602	1-216-049-91	RES-CHIP	1K	5%	1/10W
R603	1-216-001-00	RES-CHIP	10	5%	1/10W
R604	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R605	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R606	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R607	1-216-001-00	RES-CHIP	10	5%	1/10W
R608	1-216-001-00	RES-CHIP	10	5%	1/10W
R609	1-216-017-91	RES-CHIP	47	5%	1/10W
R610	1-216-017-91	RES-CHIP	47	5%	1/10W
R611	1-216-017-91	RES-CHIP	47	5%	1/10W
R612	1-216-017-91	RES-CHIP	47	5%	1/10W
R613	1-216-017-91	RES-CHIP	47	5%	1/10W
R614	1-216-017-91	RES-CHIP	47	5%	1/10W
R615	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R616	1-216-083-00	RES-CHIP	27K	5%	1/10W
R617	1-216-017-91	RES-CHIP	47	5%	1/10W
R618	1-216-083-00	RES-CHIP	27K	5%	1/10W
R622	1-216-031-00	RES-CHIP	180	5%	1/10W
R700	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R701	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R702	1-216-025-91	RES-CHIP	100	5%	1/10W
R703	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R704	1-216-085-00	RES-CHIP	33K	5%	1/10W
R705	1-216-097-91	RES-CHIP	100K	5%	1/10W
R706	1-216-097-91	RES-CHIP	100K	5%	1/10W
R707	1-216-097-91	RES-CHIP	100K	5%	1/10W
R708	1-216-097-91	RES-CHIP	100K	5%	1/10W
R709	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R710	1-216-073-00	RES-CHIP	10K	5%	1/10W
R711	1-216-049-91	RES-CHIP	1K	5%	1/10W
R712	1-216-049-91	RES-CHIP	1K	5%	1/10W
R713	1-216-049-91	RES-CHIP	1K	5%	1/10W
R714	1-216-049-91	RES-CHIP	1K	5%	1/10W
R715	1-216-073-00	RES-CHIP	10K	5%	1/10W
R716	1-249-381-11	CARBON	1	5%	1/4W
R717	1-216-049-91	RES-CHIP	1K	5%	1/10W
R718	1-216-073-00	RES-CHIP	10K	5%	1/10W
R719	1-216-073-00	RES-CHIP	10K	5%	1/10W
R720	1-216-001-00	RES-CHIP	10	5%	1/10W
R721	1-216-073-00	RES-CHIP	10K	5%	1/10W
R722	1-216-073-00	RES-CHIP	10K	5%	1/10W
R723	1-216-001-00	RES-CHIP	10	5%	1/10W
R724	1-216-001-00	RES-CHIP	10	5%	1/10W
R725	1-216-001-00	RES-CHIP	10	5%	1/10W
R726	1-216-001-00	RES-CHIP	10	5%	1/10W
R727	1-216-001-00	RES-CHIP	10	5%	1/10W
R728	1-216-073-00	RES-CHIP	10K	5%	1/10W
R729	1-216-073-00	RES-CHIP	10K	5%	1/10W
R730	1-216-025-91	RES-CHIP	100	5%	1/10W
R731	1-216-025-91	RES-CHIP	100	5%	1/10W
R732	1-216-025-91	RES-CHIP	100	5%	1/10W
R733	1-216-025-91	RES-CHIP	100	5%	1/10W
R800	1-216-033-00	RES-CHIP	220	5%	1/10W
R801	1-216-033-00	RES-CHIP	220	5%	1/10W
R802	1-216-049-91	RES-CHIP	1K	5%	1/10W
R803	1-216-097-91	RES-CHIP	100K	5%	1/10W
R804	1-216-081-00	RES-CHIP	22K	5%	1/10W
R805	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R806	1-216-081-00	RES-CHIP	22K	5%	1/10W
R807	1-216-081-00	RES-CHIP	22K	5%	1/10W
R808	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R809	1-216-081-00	RES-CHIP	22K	5%	1/10W
R810	1-216-081-00	RES-CHIP	22K	5%	1/10W
R811	1-216-089-91	RES-CHIP	47K	5%	1/10W
R812	1-216-089-91	RES-CHIP	47K	5%	1/10W
R813	1-216-081-00	RES-CHIP	22K	5%	1/10W
R814	1-216-061-00	RES-CHIP	3.3K	5%	1/10W

B

Ref.No.	Part No.	Description			Remark
R815	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R816	1-216-033-00	RES-CHIP	220	5%	1/10W
R817	1-216-019-00	RES-CHIP	56	5%	1/10W
R818	1-216-033-00	RES-CHIP	220	5%	1/10W
R819	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R820	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R821	1-216-019-00	RES-CHIP	56	5%	1/10W
R822	1-216-097-91	RES-CHIP	100K	5%	1/10W
R823	1-249-385-11	CARBON	2.2	5%	1/4W
R824	1-216-097-91	RES-CHIP	100K	5%	1/10W
R825	1-216-097-91	RES-CHIP	100K	5%	1/10W
R826	1-249-385-11	CARBON	2.2	5%	1/4W
R828	1-216-081-00	RES-CHIP	22K	5%	1/10W
R829	1-216-081-00	RES-CHIP	22K	5%	1/10W
R830	1-216-369-00	METAL OXIDE	1	5%	2W
R1000	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1001	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R1002	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1003	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R1004	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1005	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R1006	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1007	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1008	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1009	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1010	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R1011	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1012	1-216-041-00	RES-CHIP	470	5%	1/10W
R1013	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1014	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1015	1-216-025-91	RES-CHIP	100	5%	1/10W
R1016	1-216-025-91	RES-CHIP	100	5%	1/10W
R1017	1-216-025-91	RES-CHIP	100	5%	1/10W
R1018	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1019	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1020	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1021	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1022	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1023	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1024	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1025	1-216-025-91	RES-CHIP	100	5%	1/10W
R1026	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1027	1-216-025-91	RES-CHIP	100	5%	1/10W
R1028	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1029	1-216-025-91	RES-CHIP	100	5%	1/10W
R1030	1-216-045-00	RES-CHIP	680	5%	1/10W
R1031	1-216-045-00	RES-CHIP	680	5%	1/10W
R1032	1-216-045-00	RES-CHIP	680	5%	1/10W
R1033	1-216-025-91	RES-CHIP	100	5%	1/10W
R1034	1-216-025-91	RES-CHIP	100	5%	1/10W
R1035	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1036	1-216-025-91	RES-CHIP	100	5%	1/10W
R1037	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1038	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1039	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1040	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1041	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R1043	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1044	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1045	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1046	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1047	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1048	1-216-676-11	METAL CHIP	11K	0.50%	1/10W
R1049	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R1050	1-216-651-11	METAL CHIP	1K	0.50%	1/10W

Ref.No.	Part No.	Description			Remark
R1051	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1052	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R1053	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1054	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1055	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1056	1-216-652-11	METAL CHIP	1.1K	0.50%	1/10W
R1057	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1058	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R1059	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1060	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1062	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1063	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1064	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1065	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R1066	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1067	1-216-017-91	RES-CHIP	47	5%	1/10W
R1068	1-216-117-00	RES-CHIP	680K	5%	1/10W
R1069	1-216-017-91	RES-CHIP	47	5%	1/10W
R1070	1-216-021-00	RES-CHIP	68	5%	1/10W
R1071	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1073	1-216-041-00	RES-CHIP	470	5%	1/10W
R1074	1-216-295-91	SHORT	0		
R1075	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1076	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1077	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1078	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1079	1-216-079-00	RES-CHIP	18K	5%	1/10W
R1080	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1081	1-216-025-91	RES-CHIP	100	5%	1/10W
R1082	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1083	1-216-001-00	RES-CHIP	10	5%	1/10W
R1084	1-216-043-91	RES-CHIP	560	5%	1/10W
R1085	1-216-295-91	SHORT	0		
R1086	1-216-295-91	SHORT	0		
R1087	1-216-295-91	SHORT	0		
R1088	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1090	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1091	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1092	1-216-295-91	SHORT	0		
R1093	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1094	1-216-001-00	RES-CHIP	10	5%	1/10W
R1095	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1096	1-216-045-00	RES-CHIP	680	5%	1/10W
R1097	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1098	1-216-023-00	RES-CHIP	82	5%	1/10W
R1099	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1100	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1101	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1102	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1103	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1104	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1105	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1109	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1110	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1111	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1115	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R1116	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1117	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1118	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1119	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1120	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R1121	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1122	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R1123	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1124	1-216-049-91	RES-CHIP	1K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1126	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1127	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1129	1-216-676-11	METAL CHIP	11K	0.50%	1/10W
R1130	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R1131	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1132	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1133	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1134	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1135	1-216-295-91	SHORT	0		
R1136	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1137	1-216-025-91	RES-CHIP	100	5%	1/10W
R1138	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1139	1-216-037-00	RES-CHIP	330	5%	1/10W
R1140	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1141	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1142	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1143	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1144	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1145	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1146	1-216-045-00	RES-CHIP	680	5%	1/10W
R1147	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1148	1-216-025-91	RES-CHIP	100	5%	1/10W
R1149	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R1150	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1151	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1152	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1153	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1154	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1155	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1156	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1157	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1158	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1159	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1160	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1161	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1162	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1163	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1164	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1165	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1166	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1167	1-216-025-91	RES-CHIP	100	5%	1/10W
R1168	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1169	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1170	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1171	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1172	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1173	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1174	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1175	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1176	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1177	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R1178	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1179	1-218-758-11	METAL CHIP	180K	0.50%	1/10W
R1180	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1181	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R1182	1-216-025-91	RES-CHIP	100	5%	1/10W
R1183	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R1184	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1185	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1186	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1187	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1188	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1189	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1190	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1191	1-216-073-00	RES-CHIP	10K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1192	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1193	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1194	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1195	1-216-025-91	RES-CHIP	100	5%	1/10W
R1196	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R1197	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1198	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1199	1-216-025-91	RES-CHIP	100	5%	1/10W
R1200	1-216-025-91	RES-CHIP	100	5%	1/10W
R1201	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R1202	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1203	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1204	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1205	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R1206	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1207	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1208	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1209	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1210	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1211	1-216-295-91	SHORT	0		
R1212	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1213	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R1214	1-216-295-91	SHORT	0		
R1215	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1216	1-216-295-91	SHORT	0		
R1217	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1218	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1219	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1220	1-216-043-91	RES-CHIP	560	5%	1/10W
R1221	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1222	1-216-043-91	RES-CHIP	560	5%	1/10W
R1223	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1224	1-216-043-91	RES-CHIP	560	5%	1/10W
R1225	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1226	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1227	1-216-033-00	RES-CHIP	220	5%	1/10W
R1228	1-216-025-91	RES-CHIP	100	5%	1/10W
R1229	1-216-025-91	RES-CHIP	100	5%	1/10W
R1230	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1231	1-216-037-00	RES-CHIP	330	5%	1/10W
R1232	1-216-033-00	RES-CHIP	220	5%	1/10W
R1233	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1234	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1235	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R1236	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1237	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1238	1-216-062-00	RES-CHIP	3.6K	5%	1/10W
R1240	1-216-295-91	SHORT	0		
R1241	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1242	1-216-295-91	SHORT	0		
R1243	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1244	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1247	1-216-295-91	SHORT	0		
R1249	1-216-295-91	SHORT	0		
R1250	1-216-295-91	SHORT	0		
R1251	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1252	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1253	1-216-295-91	SHORT	0		
R1254	1-216-295-91	SHORT	0		
R1256	1-216-295-91	SHORT	0		
R1261	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R1262	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R1263	1-216-035-00	RES-CHIP	270	5%	1/10W
R1264	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1265	1-216-635-11	METAL CHIP	220	0.50%	1/10W

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Ref.No.	Part No.	Description			Remark
R1266	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R1267	1-216-295-91	SHORT	0		
R1269	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1270	1-216-045-00	RES-CHIP	680	5%	1/10W
R1271	1-216-025-91	RES-CHIP	100	5%	1/10W
R1272	1-216-025-91	RES-CHIP	100	5%	1/10W
R1273	1-216-047-91	RES-CHIP	820	5%	1/10W
R1274	1-216-025-91	RES-CHIP	100	5%	1/10W
R1275	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1276	1-216-045-00	RES-CHIP	680	5%	1/10W
R1277	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1278	1-216-025-91	RES-CHIP	100	5%	1/10W
R1279	1-216-117-00	RES-CHIP	680K	5%	1/10W
R1280	1-216-066-00	RES-CHIP	5.1K	5%	1/10W
R1281	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1282	1-216-045-00	RES-CHIP	680	5%	1/10W
R1283	1-216-117-00	RES-CHIP	680K	5%	1/10W
R1284	1-216-295-91	SHORT	0		
R1286	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1287	1-216-037-00	RES-CHIP	330	5%	1/10W
R1288	1-216-295-91	SHORT	0		
R1289	1-216-037-00	RES-CHIP	330	5%	1/10W
R1290	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1291	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1292	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R1293	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1294	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1295	1-216-295-91	SHORT	0		
R1296	1-216-295-91	SHORT	0		
R1297	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R1298	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R1299	1-216-025-91	RES-CHIP	100	5%	1/10W
R1300	1-216-025-91	RES-CHIP	100	5%	1/10W
R1301	1-216-295-91	SHORT	0		
R1304	1-216-295-91	SHORT	0		
R1305	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1306	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1308	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1309	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1311	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1313	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1314	1-216-093-91	RES-CHIP	68K	5%	1/10W
R1315	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R1316	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1317	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R1318	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1319	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R1320	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R2000	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2201	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2202	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2203	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2500	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R2501	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R2502	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R2503	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R2504	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R4000	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4001	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R4002	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4003	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R4004	1-216-025-91	RES-CHIP	100	5%	1/10W
R4005	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4006	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R4007	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4008	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R4009	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4010	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4011	1-216-075-00	RES-CHIP	12K	5%	1/10W
R4012	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4013	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4014	1-216-081-00	RES-CHIP	22K	5%	1/10W
R4015	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R4016	1-216-085-00	RES-CHIP	33K	5%	1/10W
R4017	1-216-001-00	RES-CHIP	10	5%	1/10W
R4018	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4019	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R4020	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4021	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4022	1-216-648-11	METAL CHIP	750	0.50%	1/10W
R4023	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4024	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4025	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4026	1-216-001-00	RES-CHIP	10	5%	1/10W
R4027	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4028	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4029	1-216-077-91	RES-CHIP	15K	5%	1/10W
R4030	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4031	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4032	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4033	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4034	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4035	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4036	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R4037	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4038	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4039	1-216-105-91	RES-CHIP	220K	5%	1/10W
R4040	1-216-097-91	RES-CHIP	100K	5%	1/10W
R4041	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4042	1-216-081-00	RES-CHIP	22K	5%	1/10W
R4043	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4044	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4045	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4046	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4047	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4048	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R4049	1-216-626-11	METAL CHIP	91	0.50%	1/10W
R4050	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4051	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4052	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4053	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R4054	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4055	1-216-083-00	RES-CHIP	27K	5%	1/10W
R4056	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4057	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4058	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4059	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R4060	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4061	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4062	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4063	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4064	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R4065	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R4066	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R4067	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4068	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R4069	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4070	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4071	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R4072	1-216-097-91	RES-CHIP	100K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R4073	1-216-025-91	RES-CHIP	100	5%	1/10W
R4074	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4076	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4077	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4078	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4079	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4080	1-216-097-91	RES-CHIP	100K	5%	1/10W
R4081	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4082	1-216-097-91	RES-CHIP	100K	5%	1/10W
R4083	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4084	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4085	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4086	1-216-295-91	SHORT	0		
R4088	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4089	1-216-081-00	RES-CHIP	22K	5%	1/10W
R4090	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R4091	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4092	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R4093	1-216-025-91	RES-CHIP	100	5%	1/10W
R4094	1-216-089-91	RES-CHIP	47K	5%	1/10W
R4095	1-216-033-00	RES-CHIP	220	5%	1/10W
R4096	1-216-133-00	RES-CHIP	3.3M	5%	1/10W
R4097	1-216-644-11	METAL CHIP	510	0.50%	1/10W
R4098	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4099	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R4100	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R4101	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R4102	1-216-097-91	RES-CHIP	100K	5%	1/10W
R4103	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R4104	1-216-031-00	RES-CHIP	180	5%	1/10W
R4105	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4106	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R4107	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R4109	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R4110	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4111	1-216-637-11	METAL CHIP	270	0.50%	1/10W
R4112	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4113	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R4114	1-216-045-00	RES-CHIP	680	5%	1/10W
R4115	1-216-043-91	RES-CHIP	560	5%	1/10W
R4116	1-216-045-00	RES-CHIP	680	5%	1/10W
R4117	1-216-045-00	RES-CHIP	680	5%	1/10W
R4118	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4119	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4120	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R4121	1-216-045-00	RES-CHIP	680	5%	1/10W
R4122	1-216-045-00	RES-CHIP	680	5%	1/10W
R4123	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R4124	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R4125	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R4126	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R4127	1-216-045-00	RES-CHIP	680	5%	1/10W
R4128	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R4129	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R4130	1-216-295-91	SHORT	0		
R4131	1-216-295-91	SHORT	0		
R4132	1-216-295-91	SHORT	0		
R4133	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R4134	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R4135	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R4136	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R4137	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R4138	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R4139	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R4140	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R4141	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R4142	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R4143	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4144	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R4145	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W

<RESISTOR BLOCK>

RB200	1-233-576-11	RES, CHIP NETWORK 100
RB201	1-233-576-11	RES, CHIP NETWORK 100
RB202	1-233-576-11	RES, CHIP NETWORK 100
RB203	1-233-576-11	RES, CHIP NETWORK 100
RB204	1-233-576-11	RES, CHIP NETWORK 100
RB205	1-233-576-11	RES, CHIP NETWORK 100
RB206	1-233-576-11	RES, CHIP NETWORK 100
RB207	1-233-576-11	RES, CHIP NETWORK 100
RB208	1-233-576-11	RES, CHIP NETWORK 100
RB209	1-233-576-11	RES, CHIP NETWORK 100
RB210	1-233-576-11	RES, CHIP NETWORK 100
RB211	1-233-576-11	RES, CHIP NETWORK 100
RB212	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB213	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB214	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB215	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB216	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB217	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB218	1-233-575-11	RES, CHIP NETWORK 22
RB219	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB220	1-233-575-11	RES, CHIP NETWORK 22
RB221	1-233-575-11	RES, CHIP NETWORK 22
RB222	1-233-575-11	RES, CHIP NETWORK 22
RB223	1-233-575-11	RES, CHIP NETWORK 22
RB224	1-233-575-11	RES, CHIP NETWORK 22
RB225	1-233-575-11	RES, CHIP NETWORK 22
RB226	1-233-575-11	RES, CHIP NETWORK 22
RB227	1-233-575-11	RES, CHIP NETWORK 22
RB228	1-233-575-11	RES, CHIP NETWORK 22
RB229	1-233-575-11	RES, CHIP NETWORK 22
RB230	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB231	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB232	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB233	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB234	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB235	1-239-409-11	RES, CHIP NETWORK 47 (3216)

<THERMISTOR>

TH100	1-809-350-21	THERMISTOR, NTC (2125)

<CRYSTAL>

X200	1-527-722-00	VIBRATOR, CRYSTAL (14.31818MHz)
X500	1-579-886-11	VIBRATOR, CRYSTAL (32.768kHz)
X501	1-781-659-21	VIBRATOR, CRYSTAL (12.288MHz)
X4000	1-760-457-11	VIBRATOR, CRYSTAL (VCO) (17.7MHz)
X4001	1-527-722-00	VIBRATOR, CRYSTAL (14.3MHz)
X4002	1-579-583-11	VIBRATOR, CERAMIC (500kHz)
X4003	1-577-611-11	OSCILALTOR, CERAMIC (500kHz)

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B1 G1 G2

Ref.No.	Part No.	Description			Remark
	* A-1131-596-A	B1 MOUNT **********			
		<CAPACITOR>			
C401	1-126-603-11	ELECT CHIP	4.7µF	20%	16V
C402	1-126-603-11	ELECT CHIP	4.7µF	20%	16V
C403	1-126-603-11	ELECT CHIP	4.7µF	20%	16V
C404	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C405	1-124-779-00	ELECT CHIP	10µF	20%	16V
C406	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C407	1-124-779-00	ELECT CHIP	10µF	20%	16V
C408	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C409	1-124-779-00	ELECT CHIP	10µF	20%	16V
C410	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C411	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C412	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C413	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C414	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C415	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C416	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
		<CONNECTOR>			
CN401	1-774-551-11	CONNECTOR, BOARD TO BOARD 5P			
CN402	1-774-551-11	CONNECTOR, BOARD TO BOARD 5P			
CN403	1-506-468-11	PIN, CONNECTOR 3P			
		<IC>			
IC401	8-759-239-55	IC TC74HC123AF(EL)			
		<TRANSISTOR>			
Q401	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q402	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q403	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q405	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q406	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q407	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q408	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q409	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q410	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q411	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q412	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q413	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q414	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q415	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q416	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q417	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q418	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q419	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q420	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q421	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
		<RESISTOR>			
R401	1-216-025-91	RES-CHIP	100	5%	1/10W
R402	1-216-049-91	RES-CHIP	1K	5%	1/10W
R403	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R404	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R405	1-216-025-91	RES-CHIP	100	5%	1/10W
R406	1-216-049-91	RES-CHIP	1K	5%	1/10W
R407	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R408	1-216-025-91	RES-CHIP	100	5%	1/10W
R409	1-216-049-91	RES-CHIP	1K	5%	1/10W
R410	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R411	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R412	1-216-025-91	RES-CHIP	100	5%	1/10W
R413	1-216-049-91	RES-CHIP	1K	5%	1/10W
R414	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R415	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R416	1-216-025-91	RES-CHIP	100	5%	1/10W
R417	1-216-049-91	RES-CHIP	1K	5%	1/10W
R418	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R419	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R420	1-216-025-91	RES-CHIP	100	5%	1/10W
R421	1-216-049-91	RES-CHIP	1K	5%	1/10W
R422	1-216-009-91	RES-CHIP	22	5%	1/10W
R423	1-216-009-91	RES-CHIP	22	5%	1/10W
R424	1-216-009-91	RES-CHIP	22	5%	1/10W
R425	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R426	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R427	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R428	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R429	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R431	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R432	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R433	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R434	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R435	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R436	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
		**********			
	* A-1311-854-A	G1 MOUNT **********			
		<CONNECTOR>			
CN5001	1-506-488-11	PIN, CONNECTOR 9P			
CN5002	1-506-483-21	PIN, CONNECTOR 4P			
CN5003	* 1-564-013-11	PIN, CONNECTOR 3P			
CN5004	1-506-490-21	PIN, CONNECTOR 11P			
CN5005	1-506-489-11	PIN, CONNECTOR 10P			
CN5006	* 1-785-108-11	PIN, CONNECTOR (PC BOARD) 40P			(PFM-500A3W)
CN5006	* 1-785-109-11	SOCKET, CONNECTOR 40P			(PFM-510A2W)
		**********			
	* A-1311-857-A	G2 MOUNT (PFM-500A3W)			
	* A-1311-853-A	G2 MOUNT (PFM-510A2W) **********			
		<CONNECTOR>			
CN4001	* 1-564-517-11	PLUG, CONNECTOR 2P			
CN4002	* 1-564-519-11	PLUG, CONNECTOR 4P			
CN4003	* 1-564-524-11	PLUG, CONNECTOR 9P			
CN4004	* 1-564-519-11	PLUG, CONNECTOR 4P			
CN4005	* 1-564-519-11	PLUG, CONNECTOR 4P			

Ref.No.	Part No.	Description			Remark
CN4006	* 1-564-594-11	PLUG, CONNECTOR 15P			
CN4007	* 1-785-109-11	SOCKET, CONNECTOR 40P (PFM-500A3W)			
CN4007	* 1-785-108-11	PIN, CONNECTOR (PC BOARD) 40P (PFM-510A2W)			
CN4008	* 1-564-520-11	PLUG, CONNECTOR 5P			
**********					
	* A-1372-829-A	H1 MOUNT **********			
	<CAPACITOR>				
C101	1-128-526-11	ELECT	100µF	20%	16V
C102	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C103	1-104-664-11	ELECT	47µF	20%	16V
C104	1-104-664-11	ELECT	47µF	20%	16V
C105	1-128-526-11	ELECT	100µF	20%	16V
C106	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C107	1-104-664-11	ELECT	47µF	20%	16V
C108	1-104-664-11	ELECT	47µF	20%	16V
C109	1-104-664-11	ELECT	47µF	20%	16V
C110	1-104-664-11	ELECT	47µF	20%	16V
C111	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C112	1-107-701-11	ELECT	47µF	20%	16V
C113	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C114	1-104-664-11	ELECT	47µF	20%	16V
C115	1-104-664-11	ELECT	47µF	20%	16V
C116	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C117	1-107-701-11	ELECT	47µF	20%	16V
C118	1-104-664-11	ELECT	47µF	20%	16V
C119	1-104-664-11	ELECT	47µF	20%	16V
C120	1-128-526-11	ELECT	100µF	20%	16V
C121	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C122	1-104-664-11	ELECT	47µF	20%	16V
C123	1-104-664-11	ELECT	47µF	20%	16V
C124	1-104-664-11	ELECT	47µF	20%	16V
C125	1-104-664-11	ELECT	47µF	20%	16V
C126	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C127	1-107-701-11	ELECT	47µF	20%	16V
C128	1-107-716-11	ELECT	33µF	20%	16V
C129	1-107-716-11	ELECT	33µF	20%	16V
C130	1-107-716-11	ELECT	33µF	20%	16V
C131	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C132	1-128-526-11	ELECT	100µF	20%	16V
C133	1-128-526-11	ELECT	100µF	20%	16V
C134	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C135	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C136	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C137	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C138	1-104-664-11	ELECT	47µF	20%	16V
C139	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C140	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C141	1-126-933-11	ELECT	100µF	20%	16V
C142	1-126-933-11	ELECT	100µF	20%	16V
C143	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C144	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C145	1-104-664-11	ELECT	47µF	20%	25V
C146	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C147	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C148	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C181	1-136-177-00	MYLAR	1µF	5%	50V
C182	1-136-177-00	MYLAR	1µF	5%	50V
C183	1-136-177-00	MYLAR	1µF	5%	50V
C184	1-136-177-00	MYLAR	1µF	5%	50V
C187	1-104-665-11	ELECT	100µF	20%	10V
C191	1-136-177-00	MYLAR	1µF	5%	50V
C192	1-136-177-00	MYLAR	1µF	5%	50V
C193	1-136-177-00	MYLAR	1µF	5%	50V
C194	1-136-177-00	MYLAR	1µF	5%	50V
C200	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C201	1-163-038-91	CERAMIC CHIP	0.1µF		25V
	<CONNECTOR>				
CN101	* 1-506-477-11	PIN, CONNECTOR 12P			
CN102	1-506-473-11	PIN, CONNECTOR 8P			
CN103	* 1-564-005-11	PIN, CONNECTOR 6P			
CN104	* 1-774-523-11	PIN, CONNECTOR (PC BOARD) 64P			
CN105	1-506-472-11	PIN, CONNECTOR 7P			
	<DIODE>				
D101	8-719-105-91	DIODE RD5.6M-T1B2			
D102	8-719-105-91	DIODE RD5.6M-T1B2			
D103	8-719-105-91	DIODE RD5.6M-T1B2			
D104	8-719-105-91	DIODE RD5.6M-T1B2			
D181	8-719-073-01	DIODE MA111-TX			
D182	8-719-073-01	DIODE MA111-TX			
D183	8-719-073-01	DIODE MA111-TX			
D184	8-719-158-49	DIODE UDZ-TE-17-12B			
D191	8-719-073-01	DIODE MA111-TX			
D192	8-719-073-01	DIODE MA111-TX			
D193	8-719-073-01	DIODE MA111-TX			
D194	8-719-158-49	DIODE UDZ-TE-17-12B			
	<IC>				
IC101	8-759-360-07	IC BA7657F-E2			
IC102	8-759-383-61	IC TL026CPS-E05			
IC103	8-759-383-61	IC TL026CPS-E05			
IC104	8-759-970-89	IC BA10358F-T2			
IC105	8-759-390-38	IC LM2940CT-12FL91			
IC106	8-759-366-35	IC TC4W66F(TE12R)			
IC107	8-759-366-35	IC TC4W66F(TE12R)			
	<CHIP CONDUCTOR>				
JR102	1-216-295-91	SHORT	0		
	<COIL>				
L101	1-408-615-31	INDUCTOR	100µH		
	<TRANSISTOR>				
Q101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q102	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q103	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q104	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q105	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q106	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q107	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q108	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q109	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q110	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q111	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q112	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q113	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			

H1

Ref.No.	Part No.	Description				Remark
Q114	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR				
Q181	8-729-216-22	TRANSISTOR 2SA1037K-T-146-S				
Q182	1-801-806-11	TRANSISTOR DTC144EKA-T146				
Q191	8-729-216-22	TRANSISTOR 2SA1037K-T-146-S				
Q192	1-801-806-11	TRANSISTOR DTC144EKA-T146				
Q200	1-801-806-11	TRANSISTOR DTC144EKA-T146				
Q201	1-801-806-11	TRANSISTOR DTC144EKA-T146				
	<RESISTOR>					
R101	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R102	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R103	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R104	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R105	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R106	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R107	1-216-639-11	METAL CHIP	330	0.50%	1/10W	
R108	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R109	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R110	1-216-639-11	METAL CHIP	330	0.50%	1/10W	
R111	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R112	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R113	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R114	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R115	1-216-627-11	METAL CHIP	100	0.50%	1/10W	
R116	1-216-641-11	METAL CHIP	390	0.50%	1/10W	
R117	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R118	1-216-641-11	METAL CHIP	390	0.50%	1/10W	
R119	1-216-645-11	METAL CHIP	560	0.50%	1/10W	
R120	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R121	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R122	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R123	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R124	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R125	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R126	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R127	1-216-633-11	METAL CHIP	180	0.50%	1/10W	
R128	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R129	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R130	1-216-641-11	METAL CHIP	390	0.50%	1/10W	
R131	1-216-637-11	METAL CHIP	270	0.50%	1/10W	
R132	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R133	1-216-645-11	METAL CHIP	560	0.50%	1/10W	
R134	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R135	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R136	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R137	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R138	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R139	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R140	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R141	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R142	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R143	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R144	1-216-639-11	METAL CHIP	330	0.50%	1/10W	
R145	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R146	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R147	1-216-639-11	METAL CHIP	330	0.50%	1/10W	
R148	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R149	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R150	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R151	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R152	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R153	1-216-641-11	METAL CHIP	390	0.50%	1/10W	
R154	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R155	1-216-639-11	METAL CHIP	330	0.50%	1/10W	
R156	1-216-645-11	METAL CHIP	560	0.50%	1/10W	
R157	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R158	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R159	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R160	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R161	1-218-776-11	METAL CHIP	1M	0.50%	1/10W	
R162	1-218-776-11	METAL CHIP	1M	0.50%	1/10W	
R163	1-218-776-11	METAL CHIP	1M	0.50%	1/10W	
R164	1-216-627-11	METAL CHIP	100	0.50%	1/10W	
R165	1-216-627-11	METAL CHIP	100	0.50%	1/10W	
R166	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R167	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R168	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R169	1-216-631-11	METAL CHIP	150	0.50%	1/10W	
R170	1-216-631-11	METAL CHIP	150	0.50%	1/10W	
R171	1-216-631-11	METAL CHIP	150	0.50%	1/10W	
R172	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R173	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R174	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R175	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R176	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R177	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R178	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R179	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R180	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R181	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R182	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R183	1-216-629-11	METAL CHIP	120	0.50%	1/10W	
R184	1-216-629-11	METAL CHIP	120	0.50%	1/10W	
R185	1-216-629-11	METAL CHIP	120	0.50%	1/10W	
R188	1-216-081-00	RES-CHIP	22K	5%	1/10W	
R191	1-216-699-91	METAL CHIP	100K	0.50%	1/10W	
R192	1-216-693-11	METAL CHIP	56K	0.50%	1/10W	
R193	1-216-695-11	METAL CHIP	68K	0.50%	1/10W	
R194	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R195	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R196	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R197	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R201	1-216-699-91	METAL CHIP	100K	0.50%	1/10W	
R202	1-216-693-11	METAL CHIP	56K	0.50%	1/10W	
R203	1-216-695-11	METAL CHIP	68K	0.50%	1/10W	
R204	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R205	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R206	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R207	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R210	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R211	1-216-645-11	METAL CHIP	560	0.50%	1/10W	
R212	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R213	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R214	1-216-613-11	METAL CHIP	27	0.50%	1/10W	
R215	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R216	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R217	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R218	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R219	1-216-073-00	RES-CHIP	10K	5%	1/10W	

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Ref.No.	Part No.	Description			Remark
	* A-1372-828-A	H6 MOUNT **********			
	<CAPACITOR>				
C701	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C702	1-126-396-11	ELECT CHIP	47µF	20%	16V
C703	1-126-392-11	ELECT CHIP	100µF	20%	6.3V
C704	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C705	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C706	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C707	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C708	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C709	1-126-392-11	ELECT CHIP	100µF	20%	6.3V
C710	1-126-396-11	ELECT CHIP	47µF	20%	16V
C711	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C712	1-126-392-11	ELECT CHIP	100µF	20%	6.3V
C713	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C714	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C715	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
	<CONNECTOR>				
CN701	* 1-506-477-11	PIN, CONNECTOR 12P			
CN702	1-506-472-11	PIN, CONNECTOR 7P			
CN703	* 1-564-005-11	PIN, CONNECTOR 6P			
CN704	1-506-474-11	PIN, CONNECTOR 9P			
	<DIODE>				
D701	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D702	8-719-073-01	DIODE MA111-TX			
D703	8-719-978-04	DIODE DTZ-TT11-3.3B			
D704	8-719-978-04	DIODE DTZ-TT11-3.3B			
D705	8-719-073-01	DIODE MA111-TX			
D706	8-719-073-01	DIODE MA111-TX			
D707	8-719-073-01	DIODE MA111-TX			
D708	8-719-073-01	DIODE MA111-TX			
D709	8-719-073-01	DIODE MA111-TX			
D710	8-719-073-01	DIODE MA111-TX			
D711	8-719-073-01	DIODE MA111-TX			
D712	8-719-073-01	DIODE MA111-TX			
D713	8-719-073-01	DIODE MA111-TX			
D714	8-719-073-01	DIODE MA111-TX			
D715	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D716	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D717	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D718	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D719	8-719-073-01	DIODE MA111-TX			
D720	8-719-073-01	DIODE MA111-TX			
D721	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D722	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D723	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D724	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D725	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D726	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D727	8-719-158-15	DIODE UDZ-TE-17-5.6B			
	<IC>				
IC701	8-759-439-67	IC TC7W126FU(TE12R)			
IC702	8-759-439-67	IC TC7W126FU(TE12R)			
IC703	8-759-467-84	IC MC68HC05P6SC442119B			
IC704	8-759-947-34	IC LM35DZ			
IC705	8-759-510-71	IC UPC358G2-T1			

Ref.No.	Part No.	Description			Remark
	<COIL>				
L701	1-408-615-31	INDUCTOR	100µH		
L702	1-408-615-31	INDUCTOR	100µH		
	<TRANSISTOR>				
Q701	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q702	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q703	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q704	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q705	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q706	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q707	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q708	8-729-901-98	TRANSISTOR 2SA1036K-T-146-R			
Q709	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q710	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q711	8-729-901-98	TRANSISTOR 2SA1036K-T-146-R			
	<RESISTOR>				
R701	1-216-037-00	RES-CHIP	330	5%	1/10W
R702	1-216-294-00	RES-CHIP	10M	5%	1/8W
R703	1-216-049-91	RES-CHIP	1K	5%	1/10W
R704	1-216-049-91	RES-CHIP	1K	5%	1/10W
R705	1-216-049-91	RES-CHIP	1K	5%	1/10W
R706	1-216-009-91	RES-CHIP	22	5%	1/10W
R707	1-216-009-91	RES-CHIP	22	5%	1/10W
R708	1-216-009-91	RES-CHIP	22	5%	1/10W
R709	1-216-009-91	RES-CHIP	22	5%	1/10W
R710	1-216-005-00	RES-CHIP	15	5%	1/10W
R711	1-216-009-91	RES-CHIP	22	5%	1/10W
R712	1-216-097-91	RES-CHIP	100K	5%	1/10W
R713	1-216-089-91	RES-CHIP	47K	5%	1/10W
R714	1-216-049-91	RES-CHIP	1K	5%	1/10W
R715	1-216-049-91	RES-CHIP	1K	5%	1/10W
R717	1-216-049-91	RES-CHIP	1K	5%	1/10W
R718	1-249-381-11	CARBON	1	5%	1/4W
R719	1-216-089-91	RES-CHIP	47K	5%	1/10W
R720	1-216-073-00	RES-CHIP	10K	5%	1/10W
R721	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R722	1-216-073-00	RES-CHIP	10K	5%	1/10W
R723	1-216-089-91	RES-CHIP	47K	5%	1/10W
R724	1-216-073-00	RES-CHIP	10K	5%	1/10W
R725	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R726	1-216-073-00	RES-CHIP	10K	5%	1/10W
R727	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R728	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R729	1-216-025-91	RES-CHIP	100	5%	1/10W
R730	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
	<CRYSTAL>				
X1	1-577-358-21	VIBRATOR, CERAMIC (4MHz)			

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APS-132 M

Ref.No.	Part No.	Description	Remark
	* 1-468-447-11	SWITCHING REGULATOR (APS-132 M BOARD) **********	
		HEAT SINK A ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRING WASHER	
		<DIODE>	
D101	⚠8-719-073-32	DIODE D25XB60	
D102	8-719-073-56	TRIAC BT139X-600	
D104	8-719-073-58	DIODE 20JL2C41A	
D105	8-719-073-58	DIODE 20JL2C41A	
		<TRANSISTOR>	
Q100	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q101	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q102	8-729-035-65	TRANSISTOR 2SK2370(2)	
		<THERMISTOR>	
THP100	1-809-789-61	THERMISTOR, POSITIVE	
THP101	1-809-789-51	THERMISTOR, POSITIVE	
		HEAT SINK B ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRINGWASHER	
		<TRANSISTOR>	
Q502	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q503	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q702	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q703	8-729-035-65	TRANSISTOR 2SK2370(2)	
		HEAT SINK C ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRINGWASHER	
	2-625-794-01	RUBBER (TO-3P), INSULATING	
		<DIODE>	
D200	8-719-062-31	DIODE 20DL2C41A	
D250	8-719-061-49	DIODE FCH20A10	
D251	8-719-075-55	DIODE FCH30A06	
D252	8-719-074-61	DIODE FCH30A04	
		<IC>	
IC251	8-759-098-24	IC PQ30RV11	
IC253	8-759-098-24	IC PQ30RV11	
IC254	8-759-284-06	IC PQ30RV31	
		<TRANSISTOR>	
Q204	8-729-047-67	TRANSISTOR 2SK3142-01	
Q207	8-729-047-67	TRANSISTOR 2SK3142-01	
		HEAT SINK D ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRINGWASHER	

Ref.No.	Part No.	Description	Remark
		<TRANSISTOR>	
Q105	8-729-047-46	TRANSISTOR FS7KM-16A	
Q152	8-729-039-41	TRANSISTOR FS10KM-10	
Q153	8-729-039-41	TRANSISTOR FS10KM-10	
		HEAT SINK E ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRINGWASHER	
		<DIODE>	
D400	8-719-073-58	DIODE 20JL2C41A	
D401	8-719-073-58	DIODE 20JL2C41A	
D604	8-719-077-10	DIODE 20FL2C41A	
		<CAPACITOR>	
C100	⚠1-115-380-91	CERAMIC 100pF 10% 125V	
C101	⚠1-115-380-91	CERAMIC 100pF 10% 125V	
C102	⚠1-113-920-91	CERAMIC 2200pF 20% 250V	
C103	⚠1-113-920-91	CERAMIC 2200pF 20% 250V	
C104	⚠1-131-955-51	FILM 1.5µF 10% 275V	
C105	⚠1-125-933-51	FILM 1µF 10% 275V	
C107	⚠1-125-933-51	FILM 1µF 10% 275V	
C108	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C109	1-127-822-51	FILM 1µF 10% 420V	
C110	1-127-822-51	FILM 1µF 10% 420V	
C111	1-127-822-51	FILM 1µF 10% 420V	
C112	1-165-127-11	CERAMIC 470pF 10% 500V	
C113	1-165-127-11	CERAMIC 470pF 10% 500V	
C114	1-117-716-51	FILM 2.2µF 10% 420V	
C115	1-131-942-11	ELECT 270µF 30% 450V	
C116	1-131-942-11	ELECT 270µF 30% 450V	
C117	1-113-920-11	CERAMIC 2200pF 20% 250V	
C118	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C119	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C120	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C121	1-163-263-91	CERAMIC CHIP 330pF 5% 50V	
C122	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C123	1-164-645-11	CERAMIC 1000pF 10% 500V	
C124	1-163-275-11	CERAMIC CHIP 1000pF 5% 50V	
C125	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C150	1-136-165-00	FILM 0.1µF 5% 50V	
C151	1-163-275-11	CERAMIC CHIP 1000pF 5% 50V	
C152	1-163-275-11	CERAMIC CHIP 1000pF 5% 50V	
C153	1-163-275-11	CERAMIC CHIP 1000pF 5% 50V	
C154	1-107-909-11	ELECT 47µF 20% 50V	
C155	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C156	1-117-351-91	ELECT 82µF 20% 35V	
C157	1-117-350-91	ELECT 56µF 20% 35V	
C158	1-163-133-00	CERAMIC CHIP 470pF 5% 50V	
C159	1-163-133-00	CERAMIC CHIP 470pF 5% 50V	
C160	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C161	1-163-275-11	CERAMIC CHIP 1000pF 5% 50V	
C162	1-163-275-11	CERAMIC CHIP 1000pF 5% 50V	
C163	1-163-263-91	CERAMIC CHIP 330pF 5% 50V	
C164	1-163-017-00	CERAMIC CHIP 4700pF 10% 50V	
C165	1-117-350-91	ELECT 56µF 20% 35V	
C166	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C167	1-127-761-11	FILM 0.0082µF 5% 1.25KV	
C169	1-107-903-11	ELECT 2.2µF 20% 50V	
C170	⚠1-113-924-91	CERAMIC 4700pF 20% 250V	
C171	⚠1-113-924-91	CERAMIC 4700pF 20% 250V	
C200	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C201	1-117-279-51	ELECT 3900µF 20% 10V	
C202	1-117-350-91	ELECT 56µF 20% 35V	
C204	1-117-279-51	ELECT 3900µF 20% 10V	

Ref.No.	Part No.	Description			Remark
C205	1-117-325-91	ELECT	330µF	20%	25V
C206	1-117-301-51	ELECT	820µF	20%	16V
C207	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C208	1-107-904-11	ELECT	3.3µF	20%	50V
C209	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C210	1-117-247-91	ELECT	820µF	20%	6.3V
C211	1-107-904-11	ELECT	3.3µF	20%	50V
C212	1-117-247-91	ELECT	820µF	20%	6.3V
C214	1-117-247-91	ELECT	820µF	20%	6.3V
C215	1-117-301-51	ELECT	820µF	20%	16V
C250	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C252	1-117-276-51	ELECT	1500µF	20%	10V
C253	1-117-329-51	ELECT	1500µF	20%	25V
C254	1-117-329-51	ELECT	1500µF	20%	25V
C255	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C256	1-117-344-51	ELECT	1000µF	20%	35V
C257	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C258	1-115-185-11	CERAMIC	0.033µF	10%	50V
C259	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C260	1-117-266-91	ELECT	470µF	20%	10V
C261	1-117-325-91	ELECT	330µF	20%	25V
C262	1-117-328-51	ELECT	820µF	20%	25V
C263	1-117-355-51	ELECT	560µF	20%	35V
C264	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C268	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C300	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C301	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C302	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C303	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C304	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C305	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C306	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C307	1-107-909-11	ELECT	47µF	20%	50V
C308	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C309	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C310	1-107-909-11	ELECT	47µF	20%	50V
C311	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C312	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C313	1-163-143-00	CERAMIC	1200pF	5%	50V
C314	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C315	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C316	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C317	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C400	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C401	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C402	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C404	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C405	1-164-344-11	CERAMIC CHIP	0.068µF	10%	25V
C406	1-131-944-11	ELECT	470µF	20%	200V
C407	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C408	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C409	1-117-272-11	ELECT	180µF	20%	10V
C410	1-107-906-11	ELECT	10µF	20%	50V
C411	1-107-906-11	ELECT	10µF	20%	50V
C412	1-107-906-11	ELECT	10µF	20%	50V
C413	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C414	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C415	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C416	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C417	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C418	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C419	1-131-943-11	ELECT	1200µF	30%	200V
C420	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C422	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C423	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V

Ref.No.	Part No.	Description			Remark
C500	1-127-822-51	FILM	1µF	10%	420V
C501	1-127-835-11	ELECT	22µF	20%	450V
C502	1-136-165-00	FILM	0.1µF	5%	50V
C503	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C504	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C505	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C506	1-107-909-11	ELECT	47µF	20%	50V
C507	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C508	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C509	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C510	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C511	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C512	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C513	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C514	1-163-263-91	CERAMIC CHIP	330pF	5%	50V
C515	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C516	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C517	1-131-924-11	FILM	0.068µF	5%	1.25KV
C518	1-131-924-11	FILM	0.068µF	5%	1.25KV
C519	1-131-924-11	FILM	0.068µF	5%	1.25KV
C600	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C601	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C602	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C604	1-131-945-11	ELECT	470µF	20%	100V
C605	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C606	1-164-344-11	CERAMIC CHIP	0.068µF	10%	25V
C607	1-131-945-11	ELECT	470µF	20%	100V
C608	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C609	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C610	1-107-906-11	ELECT	10µF	20%	50V
C611	1-117-272-11	ELECT	180µF	20%	10V
C612	1-107-906-11	ELECT	10µF	20%	50V
C613	1-107-906-11	ELECT	10µF	20%	50V
C614	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C615	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C616	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C617	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C618	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C619	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C620	1-131-945-11	ELECT	470µF	20%	100V
C621	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C623	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C624	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C700	1-127-822-51	FILM	1µF	10%	420V
C701	1-127-835-11	ELECT	22µF	20%	450V
C702	1-136-165-00	FILM	0.1µF	5%	50V
C703	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C704	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C705	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C706	1-107-909-11	ELECT	47µF	20%	50V
C707	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C708	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C709	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C710	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C711	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C712	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C713	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C714	1-163-263-91	CERAMIC CHIP	330pF	5%	50V
C715	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C716	1-125-916-11	FILM	0.018µF	5%	1.25KV
C717	1-125-916-11	FILM	0.018µF	5%	1.25KV
C718	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V

Ref.No.	Part No.	Description	Remark
	<CONNECTOR>		
CN1	* 1-691-960-11	PIN, CONNECTOR 3P	
CN2	* 1-580-843-11	PIN, CONNECTOR (POWER)	
CN4	* 1-691-757-11	PIN, CONNECTOR 8P	
CN5	* 1-770-291-11	PIN, CONNECTOR 7P	
CN6	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN7	* 1-564-596-11	PLUG, CONNECTOR 15P	
CN8	* 1-564-511-11	PLUG, CONNECTOR 8P	
	<DIODE>		
D100	⚠8-719-055-11	DIODE 05NH46	
D103	⚠8-719-055-11	DIODE 05NH46	
D106	8-719-988-61	DIODE 1SS355TE-17	
D107	8-719-056-84	DIODE UDZ-TE-17-7.5B	
D108	8-719-071-79	DIODE HZU22B2TRF	
D109	8-719-988-61	DIODE 1SS355TE-17	
D110	8-719-313-16	DIODE AU02A	
D111	8-719-313-16	DIODE AU02A	
D112	8-719-988-61	DIODE 1SS355TE-17	
D113	8-719-063-70	DIODE D1NL20U	
D114	8-719-063-70	DIODE D1NL20U	
D116	8-719-071-81	DIODE HZU30BTRF	
D150	8-719-988-61	DIODE 1SS355TE-17	
D151	8-719-988-61	DIODE 1SS355TE-17	
D152	8-719-988-61	DIODE 1SS355TE-17	
D153	8-719-063-70	DIODE D1NL20U	
D154	8-719-988-61	DIODE 1SS355TE-17	
D155	8-719-988-61	DIODE 1SS355TE-17	
D201	8-719-063-70	DIODE D1NL20U	
D202	8-719-063-70	DIODE D1NL20U	
D203	8-719-988-61	DIODE 1SS355TE-17	
D205	8-719-071-94	DIODE HRU0103ATRF	
D206	8-719-071-94	DIODE HRU0103ATRF	
D253	8-719-988-61	DIODE 1SS355TE-17	
D254	8-719-988-61	DIODE 1SS355TE-17	
D255	8-719-988-61	DIODE 1SS355TE-17	
D256	8-719-988-61	DIODE 1SS355TE-17	
D257	8-719-988-61	DIODE 1SS355TE-17	
D258	8-719-988-61	DIODE 1SS355TE-17	
D259	8-719-988-61	DIODE 1SS355TE-17	
D260	8-719-988-61	DIODE 1SS355TE-17	
D261	8-719-988-61	DIODE 1SS355TE-17	
D262	8-719-988-61	DIODE 1SS355TE-17	
D263	8-719-988-61	DIODE 1SS355TE-17	
D300	8-719-056-84	DIODE UDZ-TE-17-7.5B	
D301	8-719-071-94	DIODE HRU0103ATRF	
D302	8-719-071-94	DIODE HRU0103ATRF	
D303	8-719-056-84	DIODE UDZ-TE-17-7.5B	
D304	8-719-071-94	DIODE HRU0103ATRF	
D305	8-719-988-61	DIODE 1SS355TE-17	
D306	8-719-988-61	DIODE 1SS355TE-17	
D307	8-719-988-61	DIODE 1SS355TE-17	
D402	8-719-071-63	DIODE HZU6.2BTRF	
D403	8-719-988-61	DIODE 1SS355TE-17	
D404	8-719-988-61	DIODE 1SS355TE-17	
D405	8-719-988-61	DIODE 1SS355TE-17	
D406	8-719-071-63	DIODE HZU6.2BTRF	
D407	8-719-988-61	DIODE 1SS355TE-17	
D408	8-719-988-61	DIODE 1SS355TE-17	
D409	8-719-988-61	DIODE 1SS355TE-17	
D500	8-719-988-61	DIODE 1SS355TE-17	
D501	8-719-988-61	DIODE 1SS355TE-17	
D502	8-719-988-61	DIODE 1SS355TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D504	8-719-988-61	DIODE 1SS355TE-17	
D600	8-719-071-63	DIODE HZU6.2BTRF	
D601	8-719-988-61	DIODE 1SS355TE-17	
D602	8-719-988-61	DIODE 1SS355TE-17	
D603	8-719-988-61	DIODE 1SS355TE-17	
D605	8-719-071-63	DIODE HZU6.2BTRF	
D606	8-719-988-61	DIODE 1SS355TE-17	
D607	8-719-988-61	DIODE 1SS355TE-17	
D608	8-719-988-61	DIODE 1SS355TE-17	
D700	8-719-988-61	DIODE 1SS355TE-17	
D701	8-719-988-61	DIODE 1SS355TE-17	
D702	8-719-988-61	DIODE 1SS355TE-17	
D703	8-719-988-61	DIODE 1SS355TE-17	
D704	8-719-988-61	DIODE 1SS355TE-17	
	<FUSE>		
F101	⚠1-576-365-11	FUSE (15A/250V)	
	<IC>		
IC101	8-759-464-69	IC FA5317P	
IC102	8-759-098-24	IC PQ30RV11	
IC150	8-759-470-07	IC CXA8038AP	
IC200	8-759-700-65	IC NJM79L05A	
IC201	8-759-648-34	IC TA76431AS	
IC203	8-759-170-73	IC TA78L12S	
IC250	8-759-648-34	IC TA76431AS	
IC252	8-759-648-34	IC TA76431AS	
IC300	8-759-354-43	IC TK83854D	
IC301	8-759-510-73	IC BA10393F-E2	
IC302	8-759-648-34	IC TA76431AS	
IC400	8-759-510-71	IC BA10358F-E2	
IC401	8-759-648-34	IC TA76431AS	
IC402	8-759-058-50	IC XRA10324AF	
IC403	8-759-510-71	IC BA10358F-E2	
IC500	8-759-470-07	IC CXA8038AP	
IC600	8-759-510-71	IC BA10358F-E2	
IC601	8-759-648-34	IC TA76431AS	
IC602	8-759-058-50	IC XRA10324AF	
IC603	8-759-510-71	IC BA10358F-E2	
IC700	8-759-470-07	IC CXA8038AP	
	<COIL>		
L100	1-416-489-11	COIL,CHOKE	143µH
L101	1-419-372-11	COIL,CHOKE	
L201	1-406-703-21	COIL,CHOKE	3.3µH
L202	1-406-703-21	COIL,CHOKE	3.3µH
L203	1-406-703-21	COIL,CHOKE	3.3µH
L250	1-419-394-21	COIL,CHOKE	2.2µH
L251	1-419-394-21	COIL,CHOKE	2.2µH
L252	1-416-965-21	COIL,CHOKE	1µH
L253	1-406-703-21	COIL,CHOKE	3.3µH
L254	1-406-703-21	COIL,CHOKE	3.3µH
L400	1-469-371-11	COIL, CHOKE	4.2µF
L401	1-416-616-11	COIL,CHOKE	2.2µH
L501	1-419-371-11	COIL,CHOKE	484µH
L600	1-416-616-11	COIL,CHOKE	2.2µH
	<FILTER>		
LF100	⚠1-423-804-11	TRANSFORMER, LINE FILTER	
LF101	⚠1-433-843-11	TRANSFORMER, LINE FILTER	
LF102	⚠1-433-843-11	TRANSFORMER, LINE FILTER	

Ref.No.	Part No.	Description	Remark
	<PHOTO COUPLER>		
PH100	8-719-062-33	PHOTO TRIAC COUPLER S21MT2F	
PH101	8-749-010-64	PHOTO COUPLER PC123F2	
PH102	8-749-010-64	PHOTO COUPLER PC123F2	
PH103	8-749-010-64	PHOTO COUPLER PC123F2	
PH104	8-749-010-64	PHOTO COUPLER PC123F2	
PH105	8-749-010-64	PHOTO COUPLER PC123F2	
PH500	8-749-010-64	PHOTO COUPLER PC123F2	
PH501	8-749-010-64	PHOTO COUPLER PC123F2	
PH502	8-749-010-64	PHOTO COUPLER PC123F2	
PH700	8-749-010-64	PHOTO COUPLER PC123F2	
PH701	8-749-010-64	PHOTO COUPLER PC123F2	
PH702	8-749-010-64	PHOTO COUPLER PC123F2	
	<TRANSISTOR>		
Q103	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q104	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q106	8-729-035-71	TRANSISTOR 2SJ334	
Q150	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q151	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q200	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q201	8-729-900-53	TRANSISTOR DTC114EK	
Q202	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q203	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q205	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q206	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q250	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q251	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q300	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q301	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q302	8-729-040-88	TRANSISTOR 2SB1240TV2QR	
Q303	8-729-040-23	TRANSISTOR 2SD1862TV2QR	
Q304	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q305	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q400	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q401	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q403	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q404	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q405	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q406	8-729-033-07	TRANSISTOR 2SK2425	
Q500	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q501	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q600	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q601	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q603	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q604	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q605	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q606	8-729-050-53	TRANSISTOR 2SK3212-01	
Q700	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q701	8-729-141-48	TRANSISTOR 2SB624-BV345	
	<RESISTOR>		
R100	⚠1-260-131-81	CARBON 470K 5% 1/2W	
R101	1-240-313-11	CEMENT 4.7 5% 5W	
R102	1-249-397-11	CARBON 22 5% 1/4W	
R103	1-240-313-11	CEMENT 4.7 5% 5W	
R104	1-240-910-11	CEMENT 4.7 5% 5W	
R105	1-249-407-91	CARBON 150 5% 1/4W	
R106	1-219-393-11	METAL PLATE 0.05 10% 5W F	
R107	1-219-393-11	METAL PLATE 0.05 10% 5W F	
R109	1-215-857-11	METAL OXIDE 10 5% 1W F	
R110	1-215-857-11	METAL OXIDE 10 5% 1W F	

Ref.No.	Part No.	Description			Remark
R111	1-215-857-11	METAL OXIDE	10	5%	1W F
R112	1-216-073-00	RES,CHIP	10K	5%	1/10W
R113	1-216-073-00	RES,CHIP	10K	5%	1/10W
R114	1-216-073-00	RES,CHIP	10K	5%	1/10W
R115	1-215-882-51	METAL OXIDE	22	5%	2W F
R116	1-216-081-00	RES,CHIP	22K	5%	1/10W
R117	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R118	1-216-073-00	RES,CHIP	10K	5%	1/10W
R119	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R120	1-249-413-11	CARBON	470	5%	1/4W
R121	1-216-070-00	RES,CHIP	7.5K	5%	1/10W
R122	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R124	1-215-903-11	METAL OXIDE	68K	5%	2W F
R125	1-216-017-91	RES,CHIP	47	5%	1/10W
R126	1-215-903-11	METAL OXIDE	68K	5%	2W F
R127	1-215-904-11	METAL OXIDE	100K	5%	2W F
R128	1-216-037-00	RES,CHIP	330	5%	1/10W
R129	1-216-068-00	RES,CHIP	6.2K	5%	1/10W
R130	1-216-029-00	RES,CHIP	150	5%	1/10W
R131	1-216-047-00	RES,CHIP	820	5%	1/10W
R132	1-216-345-11	METAL OXIDE	0.47	5%	1W F
R133	1-216-089-91	RES,CHIP	47K		1/10W
R134	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R135	1-216-073-00	RES,CHIP	10K	5%	1/10W
R136	1-216-089-91	RES,CHIP	47K		1/10W
R137	1-216-085-00	RES,CHIP	33K	5%	1/10W
R150	1-247-807-31	CARBON	100	5%	1/4W
R151	1-249-401-11	CARBON	47	5%	1/4W
R152	1-216-081-00	RES,CHIP	22K	5%	1/10W
R153	1-216-025-00	RES,CHIP	100	5%	1/10W
R154	1-216-029-00	RES,CHIP	150	5%	1/10W
R155	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R156	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R157	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R158	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R159	1-216-073-00	RES,CHIP	10K	5%	1/10W
R160	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R161	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R162	1-216-081-00	RES,CHIP	22K	5%	1/10W
R163	1-216-081-00	RES,CHIP	22K	5%	1/10W
R164	1-249-429-11	CARBON	10K	5%	1/4W
R165	1-216-077-91	RES,CHIP	15K	5%	1/10W
R166	1-216-073-00	RES,CHIP	10K	5%	1/10W
R167	1-216-341-11	METAL OXIDE	0.22	5%	1W F
R190	1-247-791-91	CARBON	22	5%	1/4W
R191	1-216-089-91	RES,CHIP	47K		1/10W
R192	1-216-073-00	RES,CHIP	10K	5%	1/10W
R201	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R202	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R203	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R204	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R205	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R206	1-216-049-11	RES,CHIP	1K	5%	1/10W
R207	1-208-798-11	RES,CHIP	4.7K	0.5%	1/10W
R208	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R209	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R210	1-216-049-11	RES,CHIP	1K	5%	1/10W
R211	1-216-073-00	RES,CHIP	10K	5%	1/10W
R212	1-216-049-11	RES,CHIP	1K	5%	1/10W
R213	1-216-073-00	RES,CHIP	10K	5%	1/10W
R214	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R215	1-216-073-00	RES,CHIP	10K	5%	1/10W
R216	1-216-073-00	RES,CHIP	10K	5%	1/10W
R218	1-208-790-11	RES,CHIP	2.2K	0.5%	1/10W
R219	1-208-782-11	RES,CHIP	1K	0.5%	1/10W

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Ref.No.	Part No.	Description			Remark
R220	1-216-049-11	RES,CHIP	1K	5%	1/10W
R221	1-216-073-00	RES,CHIP	10K	5%	1/10W
R222	1-216-049-11	RES,CHIP	1K	5%	1/10W
R223	1-216-073-00	RES,CHIP	10K	5%	1/10W
R224	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R225	1-216-073-00	RES,CHIP	10K	5%	1/10W
R250	1-216-073-00	RES,CHIP	10K	5%	1/10W
R251	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R252	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R253	1-216-049-11	RES,CHIP	1K	5%	1/10W
R254	1-216-079-00	RES,CHIP	18K	5%	1/10W
R255	1-216-079-00	RES,CHIP	18K	5%	1/10W
R256	1-216-073-00	RES,CHIP	10K	5%	1/10W
R257	1-216-049-11	RES,CHIP	1K	5%	1/10W
R258	1-216-073-00	RES,CHIP	10K	5%	1/10W
R259	1-216-113-00	RES,CHIP	470K	5%	1/10W
R260	1-216-073-00	RES,CHIP	10K	5%	1/10W
R261	1-216-049-11	RES,CHIP	1K	5%	1/10W
R262	1-208-812-11	RES,CHIP	18K	0.5%	1/10W
R263	1-208-793-11	RES,CHIP	3K	0.5%	1/10W
R264	1-208-798-11	RES,CHIP	4.7K	0.5%	1/10W
R265	1-208-765-11	RES,CHIP	200	0.5%	1/10W
R266	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R267	1-249-417-11	CARBON	1K	5%	1/4W
R268	1-208-798-11	RES,CHIP	4.7K	0.5%	1/10W
R269	1-208-769-11	RES,CHIP	300	0.5%	1/10W
R270	1-208-797-11	RES,CHIP	4.3K	0.5%	1/10W
R271	1-216-073-00	RES,CHIP	10K	5%	1/10W
R272	1-216-049-11	RES,CHIP	1K	5%	1/10W
R273	1-208-798-11	RES,CHIP	4.7K	0.5%	1/10W
R274	1-208-764-11	RES,CHIP	180	0.5%	1/10W
R275	1-208-770-11	RES,CHIP	330	0.5%	1/10W
R276	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R277	1-208-783-11	RES,CHIP	1.1K	0.5%	1/10W
R278	1-208-788-11	RES,CHIP	1.8K	0.5%	1/10W
R279	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R280	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R281	1-208-788-11	RES,CHIP	1.8K	0.5%	1/10W
R282	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R283	1-208-767-11	RES,CHIP	240	0.5%	1/10W
R284	1-208-768-11	RES,CHIP	270	0.5%	1/10W
R285	1-208-814-91	RES,CHIP	22K	0.5%	1/10W
R286	1-208-765-11	RES,CHIP	200	0.5%	1/10W
R287	1-208-792-11	RES,CHIP	2.7K	0.5%	1/10W
R288	1-216-073-00	RES,CHIP	10K	5%	1/10W
R300	1-249-413-11	CARBON	470	5%	1/4W
R301	1-249-413-11	CARBON	470	5%	1/4W
R302	1-260-130-91	CARBON	390K	5%	1/2W
R304	1-260-130-91	CARBON	390K	5%	1/2W
R305	1-216-109-00	RES,CHIP	330K	5%	1/10W
R306	1-260-130-91	CARBON	390K	5%	1/2W
R307	1-260-130-91	CARBON	390K	5%	1/2W
R309	1-216-097-91	RES,CHIP	100K	5%	1/10W
R310	1-216-081-00	RES,CHIP	22K	5%	1/10W
R311	1-260-130-91	CARBON	390K	5%	1/2W
R312	1-260-130-91	CARBON	390K	5%	1/2W
R313	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R314	1-216-052-00	RES,CHIP	1.3K	5%	1/10W
R315	1-216-073-00	RES,CHIP	10K	5%	1/10W
R316	1-216-062-00	RES,CHIP	3.6K	5%	1/10W
R317	1-216-121-91	RES,CHIP	1M	5%	1/10W
R318	1-216-081-00	RES,CHIP	22K	5%	1/10W
R319	1-216-105-91	RES,CHIP	220K	5%	1/10W
R320	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R321	1-249-413-11	CARBON	470	5%	1/4W
R322	1-216-049-11	RES,CHIP	1K	5%	1/10W
R323	1-216-073-00	RES,CHIP	10K	5%	1/10W
R324	1-249-393-11	CARBON	10	5%	1/4W
R325	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R326	1-216-101-00	RES,CHIP	150K	5%	1/10W
R327	1-216-081-00	RES,CHIP	22K	5%	1/10W
R328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R329	1-260-128-11	CARBON	270K	5%	1/2W
R339	1-260-128-11	CARBON	270K	5%	1/2W
R340	1-216-049-11	RES,CHIP	1K	5%	1/10W
R341	1-216-042-00	RES,CHIP	510	5%	1/10W
R342	1-216-073-00	RES,CHIP	10K	5%	1/10W
R343	1-216-077-91	RES,CHIP	15K	5%	1/10W
R344	1-214-929-00	METAL	470K	1%	1/2W
R345	1-214-929-00	METAL	470K	1%	1/2W
R346	1-208-799-11	RES,CHIP	5.1K	0.5%	1/10W
R347	1-216-037-00	RES,CHIP	330	5%	1/10W
R348	1-216-073-00	RES,CHIP	10K	5%	1/10W
R349	1-247-791-91	CARBON	22	5%	1/4W
R351	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R352	1-216-113-00	RES,CHIP	470K	5%	1/10W
R400	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R401	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R402	1-216-049-11	RES,CHIP	1K	5%	1/10W
R403	1-216-081-00	RES,CHIP	22K	5%	1/10W
R404	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R405	1-216-081-00	RES,CHIP	22K	5%	1/10W
R406	1-216-070-00	RES,CHIP	7.5K	5%	1/10W
R407	1-216-073-00	RES,CHIP	10K	5%	1/10W
R408	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R409	1-216-049-11	RES,CHIP	1K	5%	1/10W
R410	1-216-049-11	RES,CHIP	1K	5%	1/10W
R411	1-216-081-00	RES,CHIP	22K	5%	1/10W
R412	1-214-914-11	METAL	110K	1%	1/2W
R413	1-214-914-11	METAL	110K	1%	1/2W
R414	1-208-795-11	RES,CHIP	3.6K	0.5%	1/10W
R415	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R416	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R417	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R418	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R419	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R420	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R421	1-217-625-00	METAL PLATE	0.05	10%	2W F
R422	1-208-807-11	RES,CHIP	11K	0.5%	1/10W
R423	1-216-105-91	RES,CHIP	220K	5%	1/10W
R424	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R425	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R426	1-216-081-00	RES,CHIP	22K	5%	1/10W
R427	1-216-089-91	RES,CHIP	47K		1/10W
R428	1-216-049-11	RES,CHIP	1K	5%	1/10W
R429	1-216-081-00	RES,CHIP	22K	5%	1/10W
R430	1-216-073-00	RES,CHIP	10K	5%	1/10W
R431	1-216-081-00	RES,CHIP	22K	5%	1/10W
R433	1-208-830-11	RES,CHIP	100K	0.5%	1/10W
R434	1-216-085-00	RES,CHIP	33K	5%	1/10W
R436	1-216-073-00	RES,CHIP	10K	5%	1/10W
R437	1-216-073-00	RES,CHIP	10K	5%	1/10W
R438	1-216-049-11	RES,CHIP	1K	5%	1/10W
R439	1-216-073-00	RES,CHIP	10K	5%	1/10W
R441	1-214-924-00	METAL	300K	1%	1/2W
R442	1-214-900-00	METAL	30K	1%	1/2W
R443	1-208-783-11	RES,CHIP	1.1K	0.5%	1/10W
R444	1-208-798-11	RES,CHIP	4.7K	0.5%	1/10W
R445	1-216-073-00	RES,CHIP	10K	5%	1/10W
R446	1-216-049-11	RES,CHIP	1K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R447	1-208-805-11	RES,CHIP	9.1K	0.5%	1/10W
R448	1-216-655-11	METAL	1.5K	0.5%	1/10W
R449	1-216-073-00	RES,CHIP	10K	5%	1/10W
R450	1-216-049-11	RES,CHIP	1K	5%	1/10W
R451	1-242-914-11	CEMENT	100	5%	5W
R452	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R453	1-216-655-11	METAL	1.5K	0.5%	1/10W
R454	1-208-830-11	RES,CHIP	100K	0.5%	1/10W
R455	1-208-830-11	RES,CHIP	100K	0.5%	1/10W
R456	1-216-073-00	RES,CHIP	10K	5%	1/10W
R457	1-208-830-11	RES,CHIP	100K	0.5%	1/10W
R459	1-208-802-11	RES,CHIP	6.8K	0.5%	1/10W
R460	1-242-916-11	CEMENT	16K	5%	5W
R461	1-216-113-00	RES,CHIP	470K	5%	1/10W
R462	1-242-916-11	CEMENT	16K	5%	5W
R465	1-216-389-91	METAL OXIDE	1	5%	3W
R466	1-216-389-91	METAL OXIDE	1	5%	3W
R467	1-242-916-11	CEMENT	16K	5%	5W
R468	1-242-914-11	CEMENT	100	5%	5W
R469	1-242-914-11	CEMENT	100	5%	5W
R500	1-247-807-31	CARBON	100	5%	1/4W
R501	1-249-401-11	CARBON	47	5%	1/4W
R502	1-216-073-00	RES,CHIP	10K	5%	1/10W
R503	1-216-037-00	RES,CHIP	330	5%	1/10W
R504	1-208-766-11	RES,CHIP	220	0.5%	1/10W
R505	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R506	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R507	1-216-081-00	RES,CHIP	22K	5%	1/10W
R508	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R509	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R510	1-216-073-00	RES,CHIP	10K	5%	1/10W
R511	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R512	1-216-049-11	RES,CHIP	1K	5%	1/10W
R513	1-216-081-00	RES,CHIP	22K	5%	1/10W
R514	1-216-081-00	RES,CHIP	22K	5%	1/10W
R515	1-217-625-00	METAL PLATE	0.05	10%	2W F
R516	1-216-081-00	RES,CHIP	22K	5%	1/10W
R517	1-216-073-00	RES,CHIP	10K	5%	1/10W
R600	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R601	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R602	1-216-049-11	RES,CHIP	1K	5%	1/10W
R603	1-216-081-00	RES,CHIP	22K	5%	1/10W
R604	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R605	1-216-081-00	RES,CHIP	22K	5%	1/10W
R606	1-216-073-00	RES,CHIP	10K	5%	1/10W
R607	1-216-073-00	RES,CHIP	10K	5%	1/10W
R608	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R609	1-216-049-11	RES,CHIP	1K	5%	1/10W
R610	1-216-049-11	RES,CHIP	1K	5%	1/10W
R611	1-216-081-00	RES,CHIP	22K	5%	1/10W
R612	1-215-459-00	METAL	39K	1%	1/4W
R613	1-215-457-00	METAL	33K	1%	1/4W
R614	1-208-795-11	RES,CHIP	3.6K	0.5%	1/10W
R615	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R616	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R617	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R618	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R619	1-208-782-11	RES,CHIP	1K	0.5%	1/10W
R620	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R621	1-217-625-00	METAL PLATE	0.05	10%	2W F
R622	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R623	1-216-105-91	RES,CHIP	220K	5%	1/10W
R624	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R625	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R626	1-216-081-00	RES,CHIP	22K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R627	1-216-089-91	RES,CHIP	47K		1/10W
R628	1-216-049-11	RES,CHIP	1K	5%	1/10W
R629	1-216-081-00	RES,CHIP	22K	5%	1/10W
R630	1-216-073-00	RES,CHIP	10K	5%	1/10W
R631	1-216-081-00	RES,CHIP	22K	5%	1/10W
R632	1-208-816-11	RES,CHIP	27K	0.5%	1/10W
R633	1-216-085-00	RES,CHIP	33K	5%	1/10W
R635	1-216-073-00	RES,CHIP	10K	5%	1/10W
R636	1-216-073-00	RES,CHIP	10K	5%	1/10W
R637	1-216-049-11	RES,CHIP	1K	5%	1/10W
R638	1-216-073-00	RES,CHIP	10K	5%	1/10W
R640	1-214-914-11	METAL	110K	1%	1/2W
R641	1-215-456-00	METAL	30K	1%	1/4W
R642	1-208-795-11	RES,CHIP	3.6K	0.5%	1/10W
R643	1-208-798-11	RES,CHIP	4.7K	0.5%	1/10W
R644	1-216-073-00	RES,CHIP	10K	5%	1/10W
R645	1-216-049-11	RES,CHIP	1K	5%	1/10W
R646	1-208-792-11	RES,CHIP	2.7K	0.5%	1/10W
R647	1-216-655-11	METAL	1.5K	0.5%	1/10W
R648	1-216-073-00	RES,CHIP	10K	5%	1/10W
R649	1-216-049-11	RES,CHIP	1K	5%	1/10W
R650	1-242-913-11	CEMENT	15	5%	5W
R651	1-208-806-11	RES,CHIP	10K	0.5%	1/10W
R652	1-216-655-11	METAL	1.5K	0.5%	1/10W
R653	1-208-832-11	RES,CHIP	120K	0.5%	1/10W
R654	1-208-832-11	RES,CHIP	120K	0.5%	1/10W
R655	1-216-073-00	RES,CHIP	10K	5%	1/10W
R658	1-208-810-11	RES,CHIP	15K	0.5%	1/10W
R659	1-242-915-11	CEMENT	2.7K	5%	5W
R660	1-216-113-00	RES,CHIP	470K	5%	1/10W
R661	1-242-915-11	CEMENT	2.7K	5%	5W
R662	1-242-913-11	CEMENT	15	5%	5W
R700	1-247-807-31	CARBON	100	5%	1/4W
R701	1-249-401-11	CARBON	47	5%	1/4W
R703	1-216-073-00	RES,CHIP	10K	5%	1/10W
R704	1-208-768-11	RES,CHIP	270	0.5%	1/10W
R705	1-208-766-11	RES,CHIP	220	0.5%	1/10W
R706	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R707	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R708	1-216-081-00	RES,CHIP	22K	5%	1/10W
R709	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R710	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R711	1-216-073-00	RES,CHIP	10K	5%	1/10W
R712	1-216-049-11	RES,CHIP	1K	5%	1/10W
R713	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R714	1-216-081-00	RES,CHIP	22K	5%	1/10W
R715	1-216-081-00	RES,CHIP	22K	5%	1/10W
R716	1-217-625-00	METAL PLATE	0.05	10%	2W F
R717	1-216-689-11	RES,CHIP	39K	5%	1/10W
R718	1-216-073-00	RES,CHIP	10K	5%	1/10W

<VARIABLE RESISTOR>

RV150	1-241-764-11	RES,ADJ,CERMET	10K
RV201	1-241-762-11	RES,ADJ,CERMET	2.2K
RV250	1-241-762-11	RES,ADJ,CERMET	2.2K
RV300	1-241-762-11	RES,ADJ,CERMET	2.2K
RV400	1-241-759-11	RES,ADJ,CERMET	220
RV401	1-241-762-11	RES,ADJ,CERMET	2.2K
RV402	1-241-760-11	RES,ADJ,CERMET	470
RV500	1-241-764-11	RES,ADJ,CERMET	10K
RV600	1-241-760-11	RES,ADJ,CERMET	470
RV601	1-241-762-11	RES,ADJ,CERMET	2.2K
RV602	1-241-760-11	RES,ADJ,CERMET	470
RV700	1-241-764-11	RES,ADJ,CERMET	10K

Ref.No.	Part No.	Description	Remark
		<TRANSFORMER>	
T101	1-435-218-11	TRANSFORMER, CONVERTOR	
T102	1-435-219-11	TRANSFORMER, CONVERTOR	
T105	1-426-931-21	TRANSFORMER, DRIVE	
T501	1-435-216-11	TRANSFORMER, CONVERTOR	
T502	1-426-931-21	TRANSFORMER, DRIVE	
T701	1-435-217-11	TRANSFORMER, CONVERTOR	
T702	1-426-931-21	TRANSFORMER, DRIVE	
		<VARISTOR>	
VDR100 ⚠	1-809-909-22	VARISTOR NV270D03-TB2	
VDR101 ⚠	1-801-625-21	VARISTOR 470NR10D	
VDR102 ⚠	1-801-625-21	VARISTOR 470NR10D	
VDR103 ⚠	1-809-909-22	VARISTOR NV270D03-TB2	
**********			
*	1-468-522-11	SWITCHING REGULATOR (APS-136 M BOARD) **********	
		HEAT SINK A ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRING WASHER	
		<DIODE>	
D101 ⚠	8-719-073-32	DIODE D25XB60	
D102	8-719-073-56	TRIAC BT139X-600	
D104	8-719-073-58	DIODE 20JL2C41A	
		<TRANSISTOR>	
Q100	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q101	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q102	8-729-035-65	TRANSISTOR 2SK2370(2)	
		<THERMISTOR>	
THP100	1-809-789-51	THERMISTOR, POSITIVE	
THP101	1-809-789-51	THERMISTOR, POSITIVE	
		HEAT SINK B ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRING WASHER	
		<TRANSISTOR>	
Q502	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q503	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q702	8-729-035-65	TRANSISTOR 2SK2370(2)	
Q703	8-729-035-65	TRANSISTOR 2SK2370(2)	
		HEAT SINK C ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRING WASHER	
	2-625-794-01	RUBBER (TO-3P), INSULATING	
		<DIODE>	
D200	8-719-062-31	DIODE 20DL2C41A	
D250	8-719-061-49	DIODE FCH20A10	
D251	8-719-060-25	DIODE FCQ30A06	
D252	8-719-055-40	DIODE FCQ30A04	

Ref.No.	Part No.	Description	Remark
		<IC>	
IC251	8-759-098-24	IC PQ30RV11	
IC253	8-759-098-24	IC PQ30RV11	
IC254	8-759-284-06	IC PQ30RV31	
		<TRANSISTOR>	
Q204	8-729-047-67	TRANSISTOR 2SK3142-01	
Q207	8-729-047-67	TRANSISTOR 2SK3142-01	
		HEAT SINK D ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRING WASHER	
		<TRANSISTOR>	
Q105	8-729-047-46	TRANSISTOR FS7KM-16A	
Q152	8-729-039-41	TRANSISTOR FS10KM-10	
Q153	8-729-039-41	TRANSISTOR FS10KM-10	
		HEAT SINK E ASSY	
	2-434-993-21	SCREW (3X6), RS TIGHT SPRING WASHER	
		<DIODE>	
D400	8-719-073-58	DIODE 20JL2C41A	
D604	8-719-077-10	DIODE 20FL2C41A	
		<CAPACITOR>	

C100	⚠1-127-775-91	CERAMIC	100pF	10%	250V
C101	⚠1-113-920-91	CERAMIC	2200pF	20%	250V
C102	⚠1-127-775-91	CERAMIC	100pF	10%	250V
C103	⚠1-113-920-91	CERAMIC	2200pF	20%	250V
C104	⚠1-125-933-51	FILM	1µF	10%	275V
C107	⚠1-125-933-51	FILM	1µF	10%	275V
C108	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C109	1-127-822-51	FILM	1µF	10%	420V
C110	1-127-822-51	FILM	1µF	10%	420V
C111	1-127-822-51	FILM	1µF	10%	420V
C112	1-165-127-11	CERAMIC	470pF	10%	500V
C113	1-165-127-11	CERAMIC	470pF	10%	500V
C114	1-117-716-51	FILM	2.2µF	10%	420V
C115	1-131-942-11	ELECT	270µF	30%	450V
C116	1-131-942-11	ELECT	270µF	30%	450V
C117	1-113-920-11	CERAMIC	2200pF	20%	250V
C118	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C119	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C120	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C121	1-163-263-91	CERAMIC CHIP	330pF	5%	50V
C122	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C123	1-164-645-11	CERAMIC	1000pF	10%	500V
C124	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C125	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C150	1-136-165-00	FILM	0.1µF	5%	50V
C151	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C152	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C153	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C154	1-107-909-11	ELECT	47µF	20%	50V
C155	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C156	1-117-351-91	ELECT	82µF	20%	35V
C157	1-117-350-91	ELECT	56µF	20%	35V
C158	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C159	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C160	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V

Ref.No.	Part No.	Description			Remark
C161	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C162	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C163	1-163-263-91	CERAMIC CHIP	330pF	5%	50V
C164	1-163-017-00	CERAMIC CHIP	4700pF	10%	50V
C165	1-117-350-91	ELECT	56µF	20%	35V
C166	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C167	1-127-761-11	FILM	0.0082µF	5%	1.25KV
C169	1-107-903-11	ELECT	2.2µF	20%	50V
C170	⚠1-113-924-91	CERAMIC	4700pF	20%	250V
C171	⚠1-113-924-91	CERAMIC	4700pF	20%	250V
C200	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C201	1-117-279-51	ELECT	3900µF	20%	10V
C202	1-117-350-91	ELECT	56µF	20%	35V
C204	1-117-279-51	ELECT	3900µF	20%	10V
C205	1-117-325-91	ELECT	330µF	20%	25V
C206	1-117-295-91	ELECT	82µF	20%	16V
C207	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C208	1-107-904-11	ELECT	3.3µF	20%	50V
C209	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C210	1-117-247-91	ELECT	820µF	20%	6.3V
C211	1-107-904-11	ELECT	3.3µF	20%	50V
C212	1-117-247-91	ELECT	820µF	20%	6.3V
C214	1-117-247-91	ELECT	820µF	20%	6.3V
C215	1-117-295-91	ELECT	82µF	20%	16V
C250	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C252	1-117-276-51	ELECT	1500µF	20%	10V
C253	1-117-329-51	ELECT	1500µF	20%	25V
C254	1-117-329-51	ELECT	1500µF	20%	25V
C255	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C256	1-117-344-51	ELECT	1000µF	20%	35V
C257	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C258	1-115-185-11	CERAMIC	0.033µF	10%	50V
C260	1-117-266-91	ELECT	470µF	20%	10V
C261	1-117-325-91	ELECT	330µF	20%	25V
C262	1-117-328-51	ELECT	820µF	20%	25V
C263	1-117-355-51	ELECT	560µF	20%	35V
C264	1-107-906-11	ELECT	10µF	20%	50V
C268	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C269	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C270	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C271	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C274	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C275	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C300	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C301	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C302	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C303	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C304	1-163-255-11	CERAMIC CHIP	150pF	5%	50V
C305	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C306	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C307	1-107-909-11	ELECT	47µF	20%	50V
C308	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C309	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C310	1-107-909-11	ELECT	47µF	20%	50V
C311	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C312	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C313	1-163-143-00	CERAMIC	1200pF	5%	50V
C314	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C315	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C316	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C317	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C350	1-163-255-11	CERAMIC CHIP	150pF	5%	50V
C400	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C401	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C402	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C404	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C405	1-164-344-11	CERAMIC CHIP	0.068µF	10%	25V
C406	1-135-873-11	ELECT	470µF	20%	250V
C407	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C408	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C409	1-117-272-11	ELECT	180µF	20%	10V
C410	1-107-906-11	ELECT	10µF	20%	50V
C411	1-107-906-11	ELECT	10µF	20%	50V
C412	1-107-906-11	ELECT	10µF	20%	50V
C413	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C414	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C415	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C416	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C417	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C418	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C419	1-131-943-11	ELECT	1200µF	30%	200V
C420	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C422	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C423	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C424	1-131-943-11	ELECT	1200µF	30%	200V
C500	1-127-822-51	FILM	1µF	10%	420V
C501	1-127-835-11	ELECT	22µF	20%	450V
C502	1-136-165-00	FILM	0.1µF	5%	50V
C503	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C504	1-163-263-91	CERAMIC CHIP	330pF	5%	50V
C505	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C506	1-107-909-11	ELECT	47µF	20%	50V
C507	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C508	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C509	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C510	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C511	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C512	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C513	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C514	1-163-263-91	CERAMIC CHIP	330pF	5%	50V
C515	1-163-017-00	CERAMIC CHIP	4700pF	10%	50V
C516	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C517	1-131-924-11	FILM	0.068µF	5%	1.25KV
C518	1-131-924-11	FILM	0.068µF	5%	1.25KV
C519	1-131-924-11	FILM	0.068µF	5%	1.25KV
C600	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C601	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C602	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C604	1-131-945-11	ELECT	470µF	20%	100V
C605	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C606	1-164-344-11	CERAMIC CHIP	0.068µF	10%	25V
C607	1-131-945-11	ELECT	470µF	20%	100V
C608	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C609	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C610	1-107-906-11	ELECT	10µF	20%	50V
C611	1-117-272-11	ELECT	180µF	20%	10V
C612	1-107-906-11	ELECT	10µF	20%	50V
C613	1-107-906-11	ELECT	10µF	20%	50V
C614	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C615	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C616	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C617	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C618	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C619	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C620	1-131-945-11	ELECT	470µF	20%	100V
C621	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C623	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C624	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C700	1-127-822-51	FILM	1µF	10%	420V
C701	1-127-835-11	ELECT	22µF	20%	450V

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Ref.No.	Part No.	Description				Remark
C702	1-136-165-00	FILM	0.1µF	5%	50V	
C703	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V	
C704	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V	
C705	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V	
C706	1-107-909-11	ELECT	47µF	20%	50V	
C707	1-163-133-00	CERAMIC CHIP	470pF	5%	50V	
C708	1-163-133-00	CERAMIC CHIP	470pF	5%	50V	
C709	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C710	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V	
C711	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V	
C712	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V	
C713	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C714	1-163-263-91	CERAMIC CHIP	330pF	5%	50V	
C715	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V	
C716	1-125-916-11	FILM	0.018µF	5%	1.25KV	
C717	1-125-916-11	FILM	0.018µF	5%	1.25KV	
C718	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
		<CONNECTOR>				
CN1	* 1-691-960-11	PIN, CONNECTOR 3P				
CN2	* 1-580-843-11	PIN, CONNECTOR (POWER)				
CN4	* 1-691-757-11	PIN, CONNECTOR 8P				
CN5	* 1-770-291-11	PIN, CONNECTOR 7P				
CN6	* 1-564-507-11	PLUG, CONNECTOR 4P				
CN7	* 1-564-596-11	PLUG, CONNECTOR 15P				
CN8	* 1-564-511-11	PLUG, CONNECTOR 8P				
		<DIODE>				
D100	⚠8-719-055-11	DIODE 05NH46				
D103	⚠8-719-055-11	DIODE 05NH46				
D106	8-719-988-61	DIODE 1SS355TE-17				
D107	8-719-060-30	DIODE HZU7.5B2TRF				
D108	8-719-071-79	DIODE HZU22B2TRF				
D109	8-719-988-61	DIODE 1SS355TE-17				
D110	8-719-313-16	DIODE AU02A				
D111	8-719-313-16	DIODE AU02A				
D112	8-719-988-61	DIODE 1SS355TE-17				
D113	8-719-063-70	DIODE D1NL20U				
D114	8-719-063-70	DIODE D1NL20U				
D116	8-719-931-52	DIODE HZS30NTD				
D117	8-719-988-61	DIODE 1SS355TE-17				
D118	8-719-988-61	DIODE 1SS355TE-17				
D119	8-719-988-61	DIODE 1SS355TE-17				
D150	8-719-988-61	DIODE 1SS355TE-17				
D151	8-719-988-61	DIODE 1SS355TE-17				
D152	8-719-988-61	DIODE 1SS355TE-17				
D153	8-719-063-70	DIODE D1NL20U				
D154	8-719-988-61	DIODE 1SS355TE-17				
D155	8-719-988-61	DIODE 1SS355TE-17				
D201	8-719-063-70	DIODE D1NL20U				
D202	8-719-063-70	DIODE D1NL20U				
D203	8-719-988-61	DIODE 1SS355TE-17				
D205	8-719-071-94	DIODE HRU0103ATRF				
D206	8-719-071-94	DIODE HRU0103ATRF				
D253	8-719-988-61	DIODE 1SS355TE-17				
D254	8-719-988-61	DIODE 1SS355TE-17				
D255	8-719-988-61	DIODE 1SS355TE-17				
D256	8-719-988-61	DIODE 1SS355TE-17				
D257	8-719-988-61	DIODE 1SS355TE-17				
D258	8-719-988-61	DIODE 1SS355TE-17				
D259	8-719-988-61	DIODE 1SS355TE-17				
D260	8-719-988-61	DIODE 1SS355TE-17				
D261	8-719-071-63	DIODE HZU6.2BTRF				
D263	8-719-914-43	DIODE DAN202K-T146				
D264	8-719-914-43	DIODE DAN202K-T146				
D265	8-719-914-44	DIODE DAP202K-T146				
D266	8-719-914-44	DIODE DAP202K-T146				
D267	8-719-988-61	DIODE 1SS355TE-17				
D268	8-719-988-61	DIODE 1SS355TE-17				
D269	8-719-988-61	DIODE 1SS355TE-17				
D270	8-719-988-61	DIODE 1SS355TE-17				
D300	8-719-060-30	DIODE HZU7.5B2TRF				
D301	8-719-071-94	DIODE HRU0103ATRF				
D302	8-719-071-94	DIODE HRU0103ATRF				
D303	8-719-060-30	DIODE HZU7.5B2TRF				
D304	8-719-071-94	DIODE HRU0103ATRF				
D305	8-719-988-61	DIODE 1SS355TE-17				
D306	8-719-988-61	DIODE 1SS355TE-17				
D307	8-719-988-61	DIODE 1SS355TE-17				
D402	8-719-071-63	DIODE HZU6.2BTRF				
D403	8-719-988-61	DIODE 1SS355TE-17				
D404	8-719-988-61	DIODE 1SS355TE-17				
D405	8-719-988-61	DIODE 1SS355TE-17				
D406	8-719-071-63	DIODE HZU6.2BTRF				
D407	8-719-988-61	DIODE 1SS355TE-17				
D408	8-719-988-61	DIODE 1SS355TE-17				
D409	8-719-988-61	DIODE 1SS355TE-17				
D500	8-719-988-61	DIODE 1SS355TE-17				
D501	8-719-988-61	DIODE 1SS355TE-17				
D504	8-719-988-61	DIODE 1SS355TE-17				
D600	8-719-071-63	DIODE HZU6.2BTRF				
D601	8-719-988-61	DIODE 1SS355TE-17				
D602	8-719-988-61	DIODE 1SS355TE-17				
D603	8-719-988-61	DIODE 1SS355TE-17				
D605	8-719-071-63	DIODE HZU6.2BTRF				
D606	8-719-988-61	DIODE 1SS355TE-17				
D607	8-719-988-61	DIODE 1SS355TE-17				
D608	8-719-988-61	DIODE 1SS355TE-17				
D700	8-719-988-61	DIODE 1SS355TE-17				
D701	8-719-988-61	DIODE 1SS355TE-17				
D704	8-719-988-61	DIODE 1SS355TE-17				
		<FUSE>				
F101	⚠1-576-365-11	FUSE (15A/250V)				
		<IC>				
IC101	8-759-464-69	IC FA5317P				
IC102	8-759-098-24	IC PQ30RV11				
IC150	8-759-470-07	IC CXA8038AP				
IC200	8-759-067-14	IC TA79L005P-TPE6				
IC201	8-759-648-34	IC TA76431AS				
IC203	8-759-170-73	IC TA78L12S				
IC250	8-759-648-34	IC TA76431AS				
IC252	8-759-060-02	IC BA10324AF-E2				
IC300	8-759-354-43	IC TK83854D				
IC301	8-759-510-73	IC BA10393F-E2				
IC302	8-759-648-34	IC TA76431AS				
IC400	8-759-510-71	IC BA10358F-E2				
IC401	8-759-648-34	IC TA76431AS				
IC402	8-759-060-02	IC BA10324AF-E2				
IC403	8-759-510-71	IC BA10358F-E2				
IC500	8-759-470-07	IC CXA8038AP				
IC600	8-759-510-71	IC BA10358F-E2				
IC601	8-759-648-34	IC TA76431AS				
IC602	8-759-060-02	IC BA10324AF-E2				
IC603	8-759-510-71	IC BA10358F-E2				
IC700	8-759-470-07	IC CXA8038AP				

Ref.No.	Part No.	Description	Remark
	<COIL>		
L100	1-416-489-11	COIL,CHOKE 143µH	
L101	1-419-372-11	COIL,CHOKE	
L201	1-406-703-21	COIL,CHOKE 3.3µH	
L202	1-406-703-21	COIL,CHOKE 3.3µH	
L203	1-406-703-21	COIL,CHOKE 3.3µH	
L250	1-419-394-21	COIL,CHOKE 2.2µH	
L251	1-419-394-21	COIL,CHOKE 2.2µH	
L252	1-416-965-21	COIL,CHOKE 1µH	
L253	1-406-703-21	COIL,CHOKE 3.3µH	
L254	1-406-703-21	COIL,CHOKE 3.3µH	
L400	1-469-371-11	COIL, CHOKE 4.2µF	
L401	1-416-616-11	COIL,CHOKE 2.2µH	
L501	1-419-371-11	COIL,CHOKE 484µH	
L600	1-416-616-11	COIL,CHOKE 2.2µH	
	<FILTER>		
LF100	⚠1-423-804-11	TRANSFORMER, LINE FILTER	
LF101	⚠1-435-556-11	TRANSFORMER, LINE FILTER	
	<PHOTO COUPLER>		
PH100	8-719-062-33	PHOTO TRIAC COUPLER S21MT2F	
PH101	8-749-010-64	PHOTO COUPLER PC123FY2	
PH102	8-749-010-64	PHOTO COUPLER PC123FY2	
PH103	8-749-010-64	PHOTO COUPLER PC123FY2	
PH104	8-749-010-64	PHOTO COUPLER PC123FY2	
PH105	8-749-010-64	PHOTO COUPLER PC123FY2	
PH500	8-749-010-64	PHOTO COUPLER PC123FY2	
PH501	8-749-010-64	PHOTO COUPLER PC123FY2	
PH502	8-749-010-64	PHOTO COUPLER PC123FY2	
PH700	8-749-010-64	PHOTO COUPLER PC123FY2	
PH701	8-749-010-64	PHOTO COUPLER PC123FY2	
PH702	8-749-010-64	PHOTO COUPLER PC123FY2	
	<TRANSISTOR>		
Q103	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q104	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q106	8-729-052-31	TRANSISTOR 2SJ496T2	
Q150	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q151	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q200	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q201	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q202	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q203	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q205	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q206	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q250	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q251	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q252	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q253	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q300	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q301	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q302	8-729-040-88	TRANSISTOR 2SB1240TV2QR	
Q303	8-729-040-23	TRANSISTOR 2SD1862TV2QR	
Q304	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q305	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q400	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q401	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q402	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q403	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q404	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q405	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q406	8-729-033-07	TRANSISTOR 2SK2425	
Q500	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q501	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q600	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q601	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q602	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q603	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q604	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q605	8-729-040-89	TRANSISTOR 2SK1590-T1B	
Q606	8-729-050-53	TRANSISTOR 2SK3212-01	
Q700	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q701	8-729-141-48	TRANSISTOR 2SB624-BV345	
	<RESISTOR>		
R100	⚠1-260-131-81	CARBON 470K 5% 1/2W	
R101	1-240-313-11	CEMENT 4.7 5% 5W	
R102	1-249-397-11	CARBON 22 5% 1/4W	
R103	1-240-313-11	CEMENT 4.7 5% 5W	
R104	1-240-910-11	CEMENT 4.7 5% 5W	
R105	1-249-407-91	CARBON 150 5% 1/4W	
R106	1-219-393-11	METAL PLATE 0.05 10% 5W F	
R107	1-219-393-11	METAL PLATE 0.05 10% 5W F	
R109	1-249-393-11	CARBON 10 5% 1/4W F	
R110	1-249-393-11	CARBON 10 5% 1/4W F	
R111	1-249-393-11	CARBON 10 5% 1/4W F	
R112	1-249-429-11	RES,CHIP 10K 5% 1/4W	
R113	1-249-429-11	RES,CHIP 10K 5% 1/4W	
R114	1-249-429-11	RES,CHIP 10K 5% 1/4W	
R115	1-215-882-51	METAL OXIDE 22 5% 2W F	
R116	1-216-079-00	RES,CHIP 18K 5% 1/10W	
R117	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R118	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R119	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R120	1-249-413-11	CARBON 470 5% 1/4W	
R121	1-216-070-00	RES,CHIP 7.5K 5% 1/10W	
R122	1-216-308-00	RES,CHIP 4.7 5% 1/10W	
R124	1-215-903-11	METAL OXIDE 68K 5% 2W F	
R125	1-216-017-91	RES,CHIP 47 5% 1/10W	
R126	1-215-903-11	METAL OXIDE 68K 5% 2W F	
R127	1-215-904-11	METAL OXIDE 100K 5% 2W F	
R128	1-216-037-00	RES,CHIP 330 5% 1/10W	
R129	1-240-383-21	RES,CHIP 6.2K 1% 1/10W	
R130	1-216-029-00	RES,CHIP 150 5% 1/10W	
R131	1-216-047-00	RES,CHIP 820 5% 1/10W	
R132	1-216-345-11	METAL OXIDE 0.47 5% 1W F	
R133	1-216-089-91	RES,CHIP 47K 1/10W	
R134	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R135	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R136	1-216-089-91	RES,CHIP 47K 1/10W	
R137	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R139	1-216-308-00	RES,CHIP 4.7 5% 1/10W	
R140	1-216-308-00	RES,CHIP 4.7 5% 1/10W	
R141	1-216-308-00	RES,CHIP 4.7 5% 1/10W	
R150	1-247-807-31	CARBON 100 5% 1/4W	
R151	1-249-401-11	CARBON 47 5% 1/4W	
R152	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R153	1-216-025-00	RES,CHIP 100 5% 1/10W	
R154	1-216-029-00	RES,CHIP 150 5% 1/10W	
R155	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R156	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R157	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R158	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R159	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R160	1-216-308-00	RES,CHIP 4.7 5% 1/10W	

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Ref.No.	Part No.	Description			Remark
R161	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R162	1-216-081-00	RES,CHIP	22K	5%	1/10W
R163	1-216-081-00	RES,CHIP	22K	5%	1/10W
R164	1-249-429-11	CARBON	10K	5%	1/4W
R165	1-216-079-00	RES,CHIP	18K	5%	1/10W
R166	1-216-073-00	RES,CHIP	10K	5%	1/10W
R167	1-216-341-11	METAL OXIDE	0.22	5%	1W F
R190	1-247-791-91	CARBON	22	5%	1/4W
R191	1-249-437-11	RES,CHIP	47K	5%	1/4W
R192	1-216-073-00	RES,CHIP	10K	5%	1/10W
R201	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R202	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R203	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R204	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R205	1-240-368-21	RES,CHIP	1.5K	1%	1/10W
R206	1-216-049-11	RES,CHIP	1K	5%	1/10W
R207	1-240-380-21	RES,CHIP	4.7K	1%	1/10W
R208	1-240-365-21	RES,CHIP	1.1K	1%	1/10W
R209	1-240-376-21	RES,CHIP	3.3K	1%	1/10W
R210	1-216-049-11	RES,CHIP	1K	5%	1/10W
R211	1-216-073-00	RES,CHIP	10K	5%	1/10W
R212	1-216-049-11	RES,CHIP	1K	5%	1/10W
R213	1-216-073-00	RES,CHIP	10K	5%	1/10W
R214	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R215	1-216-073-00	RES,CHIP	10K	5%	1/10W
R216	1-216-073-00	RES,CHIP	10K	5%	1/10W
R218	1-240-372-21	RES,CHIP	2.2K	1%	1/10W
R219	1-240-364-21	RES,CHIP	1K	1%	1/10W
R220	1-216-049-11	RES,CHIP	1K	5%	1/10W
R221	1-216-073-00	RES,CHIP	10K	5%	1/10W
R222	1-216-049-11	RES,CHIP	1K	5%	1/10W
R223	1-216-073-00	RES,CHIP	10K	5%	1/10W
R224	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R225	1-216-073-00	RES,CHIP	10K	5%	1/10W
R233	1-216-073-00	RES,CHIP	10K	5%	1/10W
R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R248	1-216-073-00	RES,CHIP	10K	5%	1/10W
R249	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R250	1-216-073-00	RES,CHIP	10K	5%	1/10W
R251	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R252	1-240-386-21	RES,CHIP	8.2K	1%	1/10W
R253	1-216-049-11	RES,CHIP	1K	5%	1/10W
R254	1-216-079-00	RES,CHIP	18K	5%	1/10W
R255	1-216-079-00	RES,CHIP	18K	5%	1/10W
R256	1-216-073-00	RES,CHIP	10K	5%	1/10W
R257	1-216-049-11	RES,CHIP	1K	5%	1/10W
R258	1-216-073-00	RES,CHIP	10K	5%	1/10W
R259	1-216-049-11	RES,CHIP	1K	5%	1/10W
R260	1-216-073-00	RES,CHIP	10K	5%	1/10W
R261	1-240-394-21	RES,CHIP	18K	1%	1/10W
R262	1-240-375-21	RES,CHIP	3K	1%	1/10W
R263	1-216-073-00	RES,CHIP	10K	5%	1/10W
R264	1-240-380-21	RES,CHIP	4.7K	1%	1/10W
R265	1-240-346-21	RES,CHIP	180	1%	1/10W
R266	1-240-376-21	RES,CHIP	3.3K	1%	1/10W
R267	1-216-073-00	RES,CHIP	10K	5%	1/10W
R268	1-240-380-21	RES,CHIP	4.7K	1%	1/10W
R269	1-240-351-21	RES,CHIP	300	1%	1/10W
R270	1-240-372-21	RES,CHIP	2.2K	1%	1/10W
R271	1-216-073-00	RES,CHIP	10K	5%	1/10W
R272	1-216-073-00	RES,CHIP	10K	5%	1/10W
R273	1-240-380-21	RES,CHIP	4.7K	1%	1/10W
R274	1-240-326-21	RES,CHIP	27	1%	1/10W
R275	1-240-367-21	RES,CHIP	1.3K	1%	1/10W
R276	1-240-388-21	RES,CHIP	10K	1%	1/10W

Ref.No.	Part No.	Description			Remark
R277	1-240-365-21	RES,CHIP	1.1K	1%	1/10W
R278	1-240-365-21	RES,CHIP	1.1K	1%	1/10W
R279	1-240-388-21	RES,CHIP	10K	1%	1/10W
R280	1-240-365-21	RES,CHIP	1.1K	1%	1/10W
R281	1-240-370-21	RES,CHIP	1.8K	1%	1/10W
R282	1-240-388-21	RES,CHIP	10K	1%	1/10W
R283	1-240-349-21	RES,CHIP	240	1%	1/10W
R284	1-240-350-21	RES,CHIP	270	1%	1/10W
R285	1-240-396-21	RES,CHIP	22K	1%	1/10W
R286	1-240-349-21	RES,CHIP	240	1%	1/10W
R287	1-240-370-21	RES,CHIP	1.8K	1%	1/10W
R288	1-216-113-00	RES,CHIP	470K	5%	1/10W
R289	1-240-562-21	RES,CHIP	47K	1%	1/10W
R290	1-240-566-21	METAL	68K	1%	1/10W
R291	1-240-386-21	RES,CHIP	8.2K	1%	1/10W
R292	1-240-372-21	RES,CHIP	2.2K	1%	1/10W
R293	1-240-374-21	RES,CHIP	2.7K	1%	1/10W
R294	1-240-376-21	RES,CHIP	3.3K	1%	1/10W
R295	1-240-386-21	RES,CHIP	8.2K	1%	1/10W
R296	1-240-376-21	RES,CHIP	3.3K	1%	1/10W
R297	1-240-394-21	RES,CHIP	18K	1%	1/10W
R298	1-240-376-21	RES,CHIP	3.3K	1%	1/10W
R299	1-240-372-21	RES,CHIP	2.2K	1%	1/10W
R300	1-249-413-11	CARBON	470	5%	1/4W
R301	1-249-413-11	CARBON	470	5%	1/4W
R302	1-260-130-91	CARBON	390K	5%	1/2W
R304	1-260-130-91	CARBON	390K	5%	1/2W
R305	1-216-109-00	RES,CHIP	330K	5%	1/10W
R306	1-260-130-91	CARBON	390K	5%	1/2W
R307	1-260-130-91	CARBON	390K	5%	1/2W
R309	1-216-097-91	RES,CHIP	100K	5%	1/10W
R310	1-216-081-00	RES,CHIP	22K	5%	1/10W
R311	1-260-130-91	CARBON	390K	5%	1/2W
R312	1-260-130-91	CARBON	390K	5%	1/2W
R313	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R314	1-216-052-00	RES,CHIP	1.3K	5%	1/10W
R315	1-216-073-00	RES,CHIP	10K	5%	1/10W
R316	1-216-062-00	RES,CHIP	3.6K	5%	1/10W
R317	1-216-121-91	RES,CHIP	1M	5%	1/10W
R318	1-216-081-00	RES,CHIP	22K	5%	1/10W
R319	1-216-105-91	RES,CHIP	220K	5%	1/10W
R320	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R321	1-249-413-11	CARBON	470	5%	1/4W
R322	1-216-049-11	RES,CHIP	1K	5%	1/10W
R323	1-216-073-00	RES,CHIP	10K	5%	1/10W
R324	1-249-393-11	CARBON	10	5%	1/4W F
R325	1-216-081-00	RES,CHIP	22K	5%	1/10W
R326	1-216-101-00	RES,CHIP	150K	5%	1/10W
R327	1-216-081-00	RES,CHIP	22K	5%	1/10W
R328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R329	1-260-128-11	CARBON	270K	5%	1/2W
R339	1-260-128-11	CARBON	270K	5%	1/2W
R340	1-216-049-11	RES,CHIP	1K	5%	1/10W
R341	1-216-042-00	RES,CHIP	510	5%	1/10W
R342	1-216-073-00	RES,CHIP	10K	5%	1/10W
R343	1-216-077-91	RES,CHIP	15K	5%	1/10W
R344	1-214-929-00	METAL	470K	1%	1/2W
R345	1-214-929-00	METAL	470K	1%	1/2W
R346	1-240-381-21	RES,CHIP	5.1K	1%	1/10W
R347	1-216-037-00	RES,CHIP	330	5%	1/10W
R348	1-216-073-00	RES,CHIP	10K	5%	1/10W
R349	1-247-791-91	CARBON	22	5%	1/4W
R351	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R352	1-216-113-00	RES,CHIP	470K	5%	1/10W
R400	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R401	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R402	1-216-049-11	RES,CHIP	1K	5%	1/10W
R403	1-216-081-00	RES,CHIP	22K	5%	1/10W
R404	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R405	1-216-081-00	RES,CHIP	22K	5%	1/10W
R406	1-216-070-00	RES,CHIP	7.5K	5%	1/10W
R407	1-216-073-00	RES,CHIP	10K	5%	1/10W
R408	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R409	1-216-049-11	RES,CHIP	1K	5%	1/10W
R410	1-216-049-11	RES,CHIP	1K	5%	1/10W
R411	1-216-081-00	RES,CHIP	22K	5%	1/10W
R412	1-240-566-21	METAL	68K	1%	1/10W
R413	1-240-566-21	METAL	68K	1%	1/10W
R414	1-240-378-21	RES,CHIP	3.9K	1%	1/10W
R415	1-216-073-00	RES,CHIP	10K	5%	1/10W
R416	1-240-364-21	RES,CHIP	1K	1%	1/10W
R417	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R418	1-240-364-21	RES,CHIP	1K	1%	1/10W
R419	1-240-364-21	RES,CHIP	1K	1%	1/10W
R420	1-240-388-21	RES,CHIP	10K	1%	1/10W
R421	1-243-638-31	METAL PLATE	0.05	2%	2W F
R422	1-240-389-21	RES,CHIP	11K	1%	1/10W
R423	1-216-105-91	RES,CHIP	220K	5%	1/10W
R424	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R425	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R426	1-216-081-00	RES,CHIP	22K	5%	1/10W
R427	1-216-089-91	RES,CHIP	47K		1/10W
R428	1-216-049-11	RES,CHIP	1K	5%	1/10W
R429	1-216-081-00	RES,CHIP	22K	5%	1/10W
R430	1-216-073-00	RES,CHIP	10K	5%	1/10W
R431	1-216-081-00	RES,CHIP	22K	5%	1/10W
R433	1-240-570-21	RES,CHIP	100K	1%	1/10W
R434	1-216-085-00	RES,CHIP	33K	5%	1/10W
R436	1-216-073-00	RES,CHIP	10K	5%	1/10W
R437	1-216-073-00	RES,CHIP	10K	5%	1/10W
R438	1-216-049-11	RES,CHIP	1K	5%	1/10W
R439	1-216-073-00	RES,CHIP	10K	5%	1/10W
R441	1-240-570-21	RES,CHIP	100K	1%	1/10W
R442	1-240-570-21	RES,CHIP	100K	1%	1/10W
R443	1-240-371-21	RES,CHIP	2K	1%	1/10W
R444	1-240-382-21	RES,CHIP	5.6K	1%	1/10W
R445	1-216-073-00	RES,CHIP	10K	5%	1/10W
R446	1-216-049-11	RES,CHIP	1K	5%	1/10W
R447	1-240-396-21	RES,CHIP	22K	1%	1/10W
R448	1-240-368-21	RES,CHIP	1.5K	1%	1/10W
R449	1-216-081-00	RES,CHIP	22K	5%	1/10W
R450	1-216-049-11	RES,CHIP	1K	5%	1/10W
R451	1-242-914-11	CEMENT	100	5%	5W
R452	1-240-388-21	RES,CHIP	10K	1%	1/10W
R453	1-240-368-21	RES,CHIP	1.5K	1%	1/10W
R454	1-240-570-21	RES,CHIP	100K	1%	1/10W
R455	1-240-570-21	RES,CHIP	100K	1%	1/10W
R456	1-216-073-00	RES,CHIP	10K	5%	1/10W
R457	1-240-570-21	RES,CHIP	100K	1%	1/10W
R459	1-240-383-21	RES,CHIP	6.2K	1%	1/10W
R460	1-242-916-11	CEMENT	16K	5%	5W
R461	1-216-113-00	RES,CHIP	470K	5%	1/10W
R462	1-242-916-11	CEMENT	16K	5%	5W
R463	1-240-365-21	RES,CHIP	1.1K	1%	1/10W
R465	1-216-393-81	METAL OXIDE	2.2	5%	3W
R466	1-216-393-81	METAL OXIDE	2.2	5%	3W
R467	1-242-916-11	CEMENT	16K	5%	5W
R468	1-242-914-11	CEMENT	100	5%	5W
R469	1-242-914-11	CEMENT	100	5%	5W
R470	1-240-566-21	METAL	68K	1%	1/10W
R471	1-240-566-21	METAL	68K	1%	1/10W
R472	1-240-570-21	RES,CHIP	100K	1%	1/10W
R473	1-240-570-21	RES,CHIP	100K	1%	1/10W
R474	1-216-095-00	RES,CHIP	82K	5%	1/10W
R500	1-247-807-31	CARBON	100	5%	1/4W
R501	1-249-401-11	CARBON	47	5%	1/4W
R502	1-216-073-00	RES,CHIP	10K	5%	1/10W
R503	1-240-349-21	RES,CHIP	240	1%	1/10W
R504	1-240-337-21	RES,CHIP	75	1%	1/10W
R505	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R506	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R507	1-216-081-00	RES,CHIP	22K	5%	1/10W
R508	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R509	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R510	1-216-073-00	RES,CHIP	10K	5%	1/10W
R511	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R512	1-216-049-11	RES,CHIP	1K	5%	1/10W
R513	1-216-081-00	RES,CHIP	22K	5%	1/10W
R514	1-216-081-00	RES,CHIP	22K	5%	1/10W
R515	1-243-639-11	METAL PLATE	0.1	2%	5W F
R516	1-240-397-21	RES,CHIP	24K	1%	1/10W
R517	1-216-073-00	RES,CHIP	10K	5%	1/10W
R600	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R601	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R602	1-216-049-11	RES,CHIP	1K	5%	1/10W
R603	1-216-081-00	RES,CHIP	22K	5%	1/10W
R604	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R605	1-216-081-00	RES,CHIP	22K	5%	1/10W
R606	1-216-073-00	RES,CHIP	10K	5%	1/10W
R607	1-216-073-00	RES,CHIP	10K	5%	1/10W
R608	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R609	1-216-049-11	RES,CHIP	1K	5%	1/10W
R610	1-216-049-11	RES,CHIP	1K	5%	1/10W
R611	1-216-081-00	RES,CHIP	22K	5%	1/10W
R612	1-215-457-00	METAL	33K	1%	1/4W
R613	1-215-457-00	METAL	33K	1%	1/4W
R614	1-240-375-21	RES,CHIP	3K	1%	1/10W
R615	1-216-085-00	RES,CHIP	33K	5%	1/10W
R616	1-240-364-21	RES,CHIP	1K	1%	1/10W
R617	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R618	1-240-364-21	RES,CHIP	1K	1%	1/10W
R619	1-240-364-21	RES,CHIP	1K	1%	1/10W
R620	1-240-388-21	RES,CHIP	10K	1%	1/10W
R621	1-243-638-31	METAL PLATE	0.05	2%	2W F
R622	1-240-388-21	RES,CHIP	10K	1%	1/10W
R623	1-216-105-91	RES,CHIP	220K	5%	1/10W
R624	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R625	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R626	1-216-081-00	RES,CHIP	22K	5%	1/10W
R627	1-216-089-91	RES,CHIP	47K		1/10W
R628	1-216-049-11	RES,CHIP	1K	5%	1/10W
R629	1-216-081-00	RES,CHIP	22K	5%	1/10W
R630	1-216-073-00	RES,CHIP	10K	5%	1/10W
R631	1-216-081-00	RES,CHIP	22K	5%	1/10W
R632	1-240-566-21	METAL	68K	1%	1/10W
R633	1-216-085-00	RES,CHIP	33K	5%	1/10W
R635	1-216-073-00	RES,CHIP	10K	5%	1/10W
R636	1-216-073-00	RES,CHIP	10K	5%	1/10W
R637	1-216-049-11	RES,CHIP	1K	5%	1/10W
R638	1-216-073-00	RES,CHIP	10K	5%	1/10W
R640	1-214-913-00	METAL	100K	1%	1/2W
R641	1-215-457-00	METAL	33K	1%	1/4W
R642	1-240-380-21	RES,CHIP	4.7K	1%	1/10W
R643	1-240-382-21	RES,CHIP	5.6K	1%	1/10W
R644	1-216-073-00	RES,CHIP	10K	5%	1/10W

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Ref.No.	Part No.	Description			Remark
R645	1-216-049-11	RES,CHIP	1K	5%	1/10W
R646	1-240-389-21	RES,CHIP	11K	1%	1/10W
R647	1-240-368-21	RES,CHIP	1.5K	1%	1/10W
R648	1-216-073-00	RES,CHIP	10K	5%	1/10W
R649	1-216-049-11	RES,CHIP	1K	5%	1/10W
R650	1-242-913-11	CEMENT	15	5%	5W
R651	1-240-388-21	RES,CHIP	10K	1%	1/10W
R652	1-240-368-21	RES,CHIP	1.5K	1%	1/10W
R653	1-242-941-21	RES,CHIP	120K	1%	1/10W
R654	1-242-941-21	RES,CHIP	120K	1%	1/10W
R655	1-216-073-00	RES,CHIP	10K	5%	1/10W
R656	1-240-362-21	RES,CHIP	820	1%	1/10W
R658	1-240-392-21	RES,CHIP	15K	1%	1/10W
R659	1-215-896-00	METAL	4.7K	5%	2W
R660	1-216-113-00	RES,CHIP	470K	5%	1/10W
R661	1-215-896-00	METAL	4.7K	5%	2W
R662	1-242-913-11	CEMENT	15	5%	5W
R663	1-216-689-11	METAL	39K	0.50%	1/10W
R700	1-247-807-31	CARBON	100	5%	1/4W
R701	1-249-401-11	CARBON	47	5%	1/4W
R703	1-216-073-00	RES,CHIP	10K	5%	1/10W
R704	1-240-332-21	RES,CHIP	47	1%	1/10W
R705	1-240-352-21	RES,CHIP	330	1%	1/10W
R706	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R707	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R708	1-216-081-00	RES,CHIP	22K	5%	1/10W
R709	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R710	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R711	1-216-073-00	RES,CHIP	10K	5%	1/10W
R712	1-216-049-11	RES,CHIP	1K	5%	1/10W
R713	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R714	1-216-081-00	RES,CHIP	22K	5%	1/10W
R715	1-216-081-00	RES,CHIP	22K	5%	1/10W
R716	1-243-638-31	METAL PLATE	0.05	2%	2W F
R717	1-216-689-11	METAL	39K	0.50%	1/10W
R718	1-216-073-00	RES,CHIP	10K	5%	1/10W
		<VARIABLE RESISTOR>			
RV150	1-241-764-11	RES,ADJ,CERMET	10K		
RV201	1-241-762-11	RES,ADJ,CERMET	2.2K		
RV250	1-241-762-11	RES,ADJ,CERMET	2.2K		
RV300	1-241-762-11	RES,ADJ,CERMET	2.2K		
RV400	1-241-760-11	RES,ADJ,CERMET	470		
RV402	1-241-760-11	RES,ADJ,CERMET	470		
RV500	1-241-764-11	RES,ADJ,CERMET	10K		
RV600	1-241-760-11	RES,ADJ,CERMET	470		
RV602	1-241-760-11	RES,ADJ,CERMET	470		
RV700	1-241-764-11	RES,ADJ,CERMET	10K		
		<TRANSFORMER>			
T101	1-435-218-11	TRANSFORMER, CONVERTOR			
T102	1-435-219-11	TRANSFORMER, CONVERTOR			
T105	1-426-931-21	TRANSFORMER, DRIVE			
T501	1-435-216-11	TRANSFORMER, CONVERTOR			
T502	1-426-931-21	TRANSFORMER, DRIVE			
T701	1-435-217-11	TRANSFORMER, CONVERTOR			
T702	1-426-931-21	TRANSFORMER, DRIVE			
		<VARISTOR>			
VDR100⚠	1-809-909-22	VARISTOR NV270D03-TB2			
VDR101⚠	1-801-625-21	VARISTOR 470NR10D			
VDR102⚠	1-801-625-21	VARISTOR 470NR10D			

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Ref.No.	Part No.	Description			Remark
	* A-1391-046-A	S1 MOUNT			
		**********			
		<CAPACITOR>			
C1201	1-126-392-11	ELECT CHIP	100µF	20%	6.3V
C1202	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1203	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1204	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
		<CONNECTOR>			
CN1201	1-506-482-11	PIN, CONNECTOR 3P			
		<IC>			
IC1201	8-759-947-34	IC LM35DZ			
IC1202	8-759-510-71	IC UPC358G2-T1			
		<RESISTOR>			
R1201	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1202	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1203	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1204	1-216-025-91	RES-CHIP	100	5%	1/10W

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	* A-1373-813-A	UA MOUNT			
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	1-900-254-68	CONNECTOR ASSY, LUG			
		<CAPACITOR>			
C1101	1-126-382-11	ELECT	100µF	20%	6.3V
C1102	1-163-031-11	CERAMIC CHIP	0.01µF		50V
		<CONNECTOR>			
CN1101	* 1-564-519-11	PLUG, CONNECTOR 4P			
CN1102	* 1-564-524-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D1101	8-719-110-17	DIODE RD10ES-T1B2			
D1102	8-719-110-17	DIODE RD10ES-T1B2			
D1103	8-719-073-01	DIODE MA111-TX			
D1111	8-719-150-92	DIODE RD33ES-T1B2			
D1112	8-719-150-92	DIODE RD33ES-T1B2			
D1113	8-719-150-92	DIODE RD33ES-T1B2			
D1114	8-719-150-92	DIODE RD33ES-T1B2			
D1115	8-719-110-17	DIODE RD10ES-T1B2			
D1116	8-719-110-17	DIODE RD10ES-T1B2			
		<JACK>			
J1101	1-573-969-11	JACK BLOCK, PIN (AUDIO L/R OUT)			
J1102	1-695-605-11	JACK, MINIATURE (CONTROL S OUT)			
J1103	1-695-605-11	JACK, MINIATURE (CONTROL S IN)			
		<COIL>			
L1101	1-422-613-11	COIL, AIR CORE			
L1102	1-422-613-11	COIL, AIR CORE			

Ref.No.	Part No.	Description			Remark
L1103	1-422-613-11	COIL, AIR CORE			
L1104	1-422-613-11	COIL, AIR CORE			
	<TRANSISTOR>				
Q1101	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q1102	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1103	8-729-120-28	TRANSISTOR 2SC2412K-T-146-S			
	<RESISTOR>				
R1101	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1102	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1103	1-216-025-91	RES-CHIP	100	5%	1/10W
R1104	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1105	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1106	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1107	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1108	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1111	1-216-025-91	RES-CHIP	100	5%	1/10W
R1112	1-216-025-91	RES-CHIP	100	5%	1/10W
	<TERMINAL BOARD>				
TB1101	1-537-187-11	TERMINAL, PUSH (4P) (SPEAKER)			
**********					
	* A-1373-812-A	UJ MOUNT **********			
	<CAPACITOR>				
C901	1-126-786-11	ELECT	47µF	20%	16V
C902	1-126-786-11	ELECT	47µF	20%	16V
C903	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C904	1-126-791-11	ELECT	10µF	20%	16V
C905	1-126-791-11	ELECT	10µF	20%	16V
C921	1-126-786-11	ELECT	47µF	20%	16V
C922	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C923	1-126-786-11	ELECT	47µF	20%	16V
C924	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C925	1-126-786-11	ELECT	47µF	20%	16V
C926	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C927	1-126-320-11	ELECT	10µF	20%	16V
C928	1-124-290-00	ELECT	47µF	20%	10V
C929	1-126-791-11	ELECT	10µF	20%	16V
C930	1-126-791-11	ELECT	10µF	20%	16V
C931	1-126-786-11	ELECT	47µF	20%	16V
C932	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C933	1-126-786-11	ELECT	47µF	20%	16V
C934	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C935	1-126-786-11	ELECT	47µF	20%	16V
C936	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C937	1-126-320-11	ELECT	10µF	20%	16V
C938	1-124-290-00	ELECT	47µF	20%	10V
C939	1-126-791-11	ELECT	10µF	20%	16V
C940	1-126-791-11	ELECT	10µF	20%	16V
C941	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C951	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C952	1-126-786-11	ELECT	47µF	20%	16V
C953	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C971	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C972	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C973	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C974	1-126-786-11	ELECT	47µF	20%	16V
C981	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C982	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C990	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C991	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
	<CONNECTOR>				
CN901	1-506-485-11	PIN, CONNECTOR 6P			
CN902	1-506-494-11	PIN, CONNECTOR 15P			
CN903	1-506-491-11	PIN, CONNECTOR 12P			
CN905	1-750-628-11	SOCKET, DIN 8P			
	<DIODE>				
D901	8-719-402-16	DIODE 02CZ10-TE85L			
D902	8-719-402-16	DIODE 02CZ10-TE85L			
D903	8-719-402-16	DIODE 02CZ10-TE85L			
D904	8-719-402-16	DIODE 02CZ10-TE85L			
D905	8-719-402-16	DIODE 02CZ10-TE85L			
D921	8-719-800-76	DIODE 1SS226-TE85L			
D922	8-719-800-76	DIODE 1SS226-TE85L			
D923	8-719-800-76	DIODE 1SS226-TE85L			
D926	8-719-402-16	DIODE 02CZ10-TE85L			
D927	8-719-402-16	DIODE 02CZ10-TE85L			
D928	8-719-800-76	DIODE 1SS226-TE85L			
D929	8-719-800-76	DIODE 1SS226-TE85L			
D930	8-719-800-76	DIODE 1SS226-TE85L			
D933	8-719-402-16	DIODE 02CZ10-TE85L			
D934	8-719-402-16	DIODE 02CZ10-TE85L			
D940	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D941	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D942	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D943	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D944	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D945	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D946	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D947	8-719-976-96	DIODE UDZ-TE-17-4.7B			
D951	8-719-402-16	DIODE 02CZ10-TE85L			
D952	8-719-402-16	DIODE 02CZ10-TE85L			
D953	8-719-402-16	DIODE 02CZ10-TE85L			
D954	8-719-402-16	DIODE 02CZ10-TE85L			
	<IC>				
IC903	8-759-446-66	IC MM1113XFBE			
IC904	8-759-446-66	IC MM1113XFBE			
IC905	8-759-360-07	IC BA7657F-E2			
IC906	8-759-011-64	IC MC74HC4052F-T2			
	<JACK>				
J901	1-694-453-12	TERMINAL BOARD ASSY, I/O (RGB/LINE IN/OUT)			
J903	1-569-578-11	TERMINAL, S (WITH SW) (LINE Y/C OUT)			
J905	1-694-452-12	TERMINAL BOARD ASSY, I/O (REMOTE)			
	<TRANSISTOR>				
Q901	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q902	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q903	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q904	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q905	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q906	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			

Ref.No.	Part No.	Description			Remark
	<RESISTOR>				
R901	1-216-295-91	SHORT	0		
R902	1-216-295-91	SHORT	0		
R903	1-216-025-91	RES-CHIP	100	5%	1/10W
R905	1-215-394-00	METAL	75	1%	1/4W
R906	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R907	1-216-089-91	RES-CHIP	47K	5%	1/10W
R909	1-216-089-91	RES-CHIP	47K	5%	1/10W
R915	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R916	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R917	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R918	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R919	1-216-033-00	RES-CHIP	220	5%	1/10W
R921	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R922	1-216-033-00	RES-CHIP	220	5%	1/10W
R924	1-216-089-91	RES-CHIP	47K	5%	1/10W
R926	1-216-089-91	RES-CHIP	47K	5%	1/10W
R928	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R929	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R930	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R931	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R932	1-216-033-00	RES-CHIP	220	5%	1/10W
R934	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R935	1-216-033-00	RES-CHIP	220	5%	1/10W
R937	1-216-089-91	RES-CHIP	47K	5%	1/10W
R939	1-216-089-91	RES-CHIP	47K	5%	1/10W
R941	1-216-081-00	RES-CHIP	22K	5%	1/10W
R942	1-216-081-00	RES-CHIP	22K	5%	1/10W
R943	1-216-121-91	RES-CHIP	1M	5%	1/10W
R944	1-216-121-91	RES-CHIP	1M	5%	1/10W
R945	1-216-121-91	RES-CHIP	1M	5%	1/10W
R946	1-216-295-91	SHORT	0		
R947	1-216-295-91	SHORT	0		
R948	1-216-295-91	SHORT	0		
R949	1-216-073-00	RES-CHIP	10K	5%	1/10W
R950	1-216-073-00	RES-CHIP	10K	5%	1/10W
R951	1-216-073-00	RES-CHIP	10K	5%	1/10W
R952	1-216-073-00	RES-CHIP	10K	5%	1/10W
R971	1-216-073-00	RES-CHIP	10K	5%	1/10W
R985	1-216-025-91	RES-CHIP	100	5%	1/10W
R986	1-216-025-91	RES-CHIP	100	5%	1/10W
R987	1-216-295-91	SHORT	0		
R988	1-216-295-91	SHORT	0		
R990	1-216-295-91	SHORT	0		
R991	1-215-394-00	METAL	75	1%	1/4W
R995	1-216-025-91	RES-CHIP	100	5%	1/10W
R996	1-216-025-91	RES-CHIP	100	5%	1/10W

****

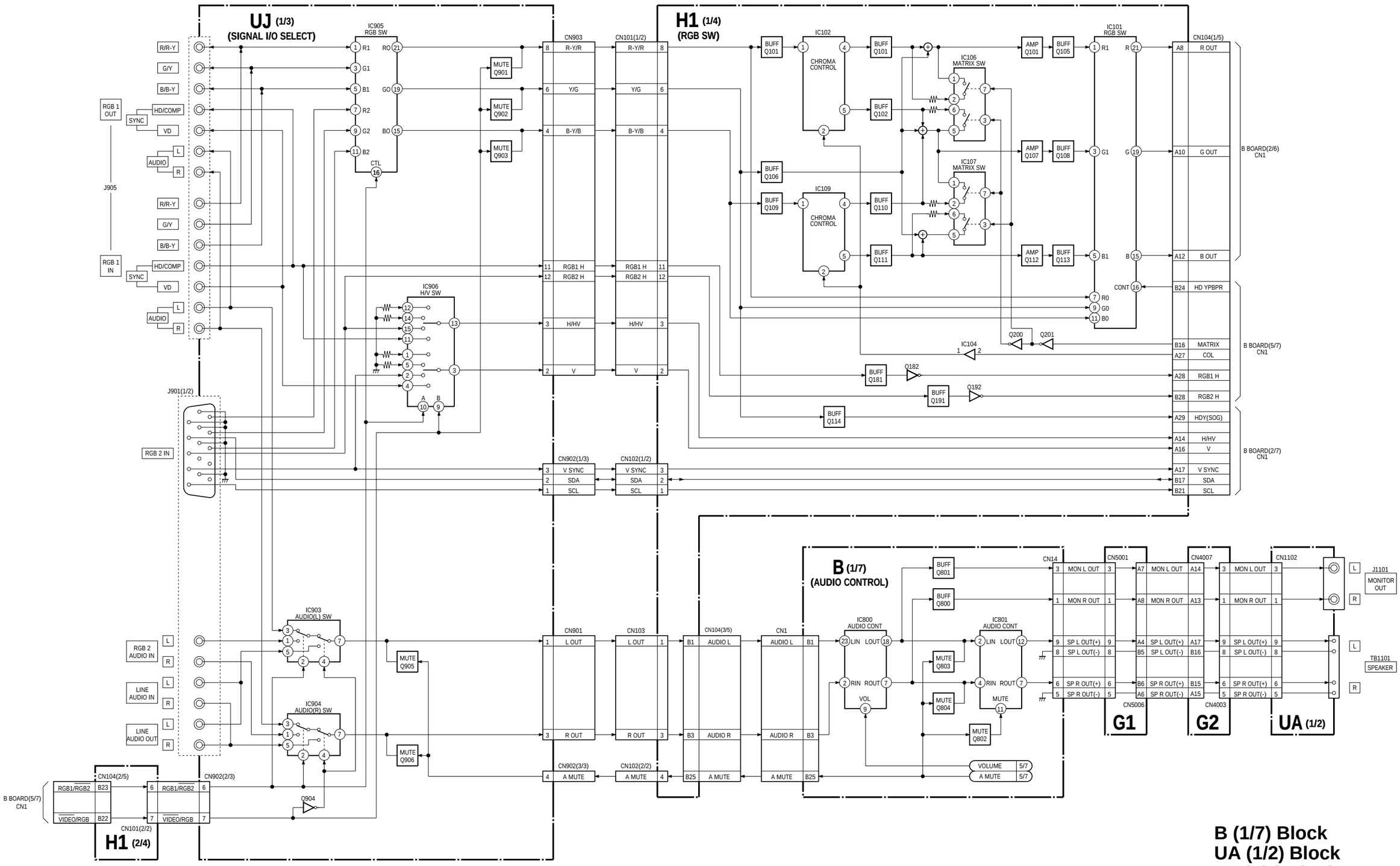
ACCESSORIES
****

X-4037-906-1	CARD ASSY, WARRANTY (L) (PFM-500A3W)
1-475-089-11	REMOTE COMMANDER (RM-921)
3-864-657-03	OPERATING INSTRUCTIONS (MB-514) (ENGLISH, FRENCH, GERMAN, SPANISH, ITALIAN, JAPANESE)
3-864-658-04	INSTALLATION MANUAL FOR DEALER (MB-514) (ENGLISH, JAPANESE)
4-076-854-01	OPERATING INSTRUCTIONS (PFM-500A3W/510A2W) (ENGLISH, FRENCH, GERMAN, SPANISH, ITALIAN, JAPANESE)

Ref.No.	Part No.	Description	Remark
	9-900-029-01	BATTERY COVER (FOR RM-921)	

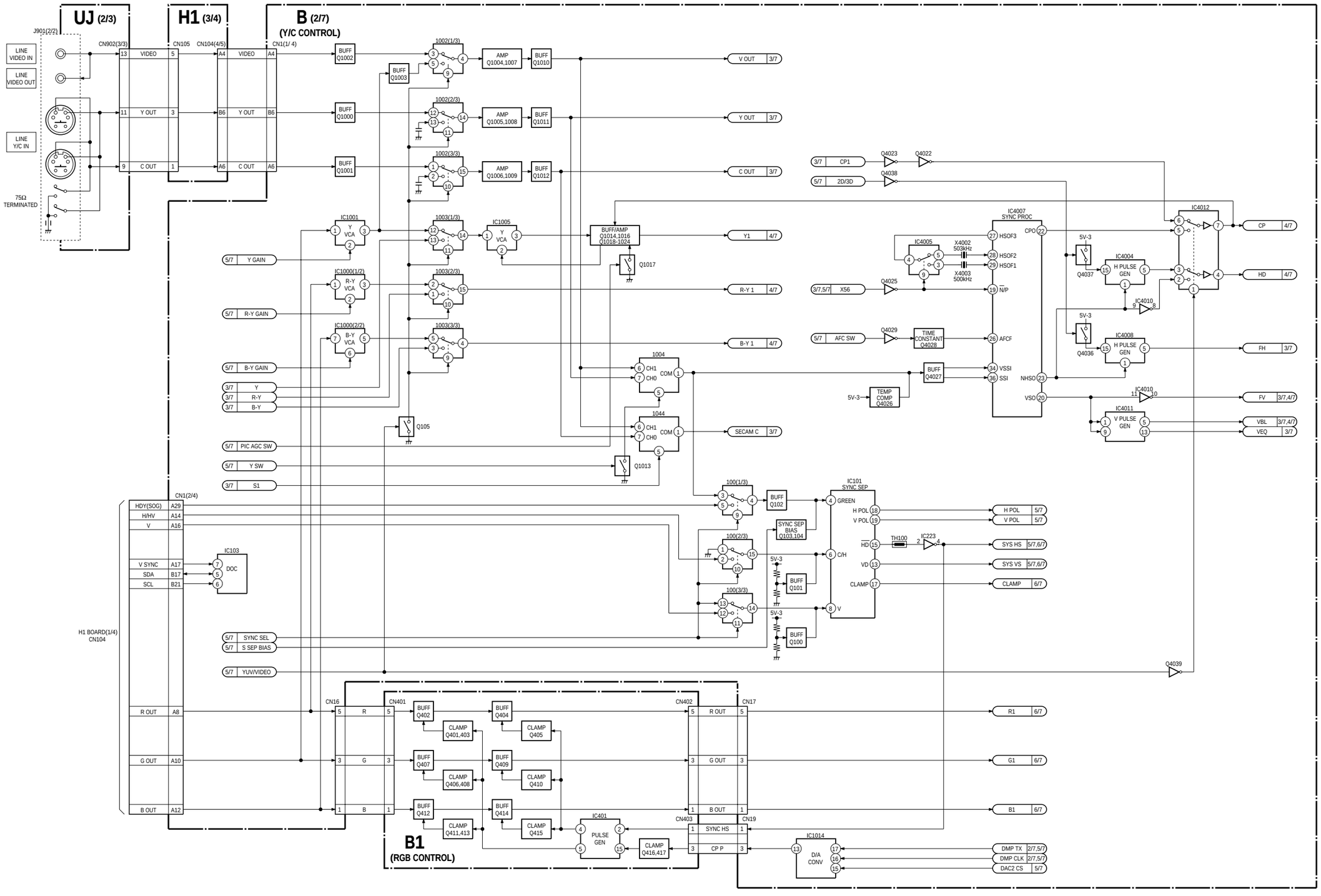
B (1/7), UA (1/2), UJ (1/3), H1 (1/4), (2/4)

Section 8
Block Diagrams



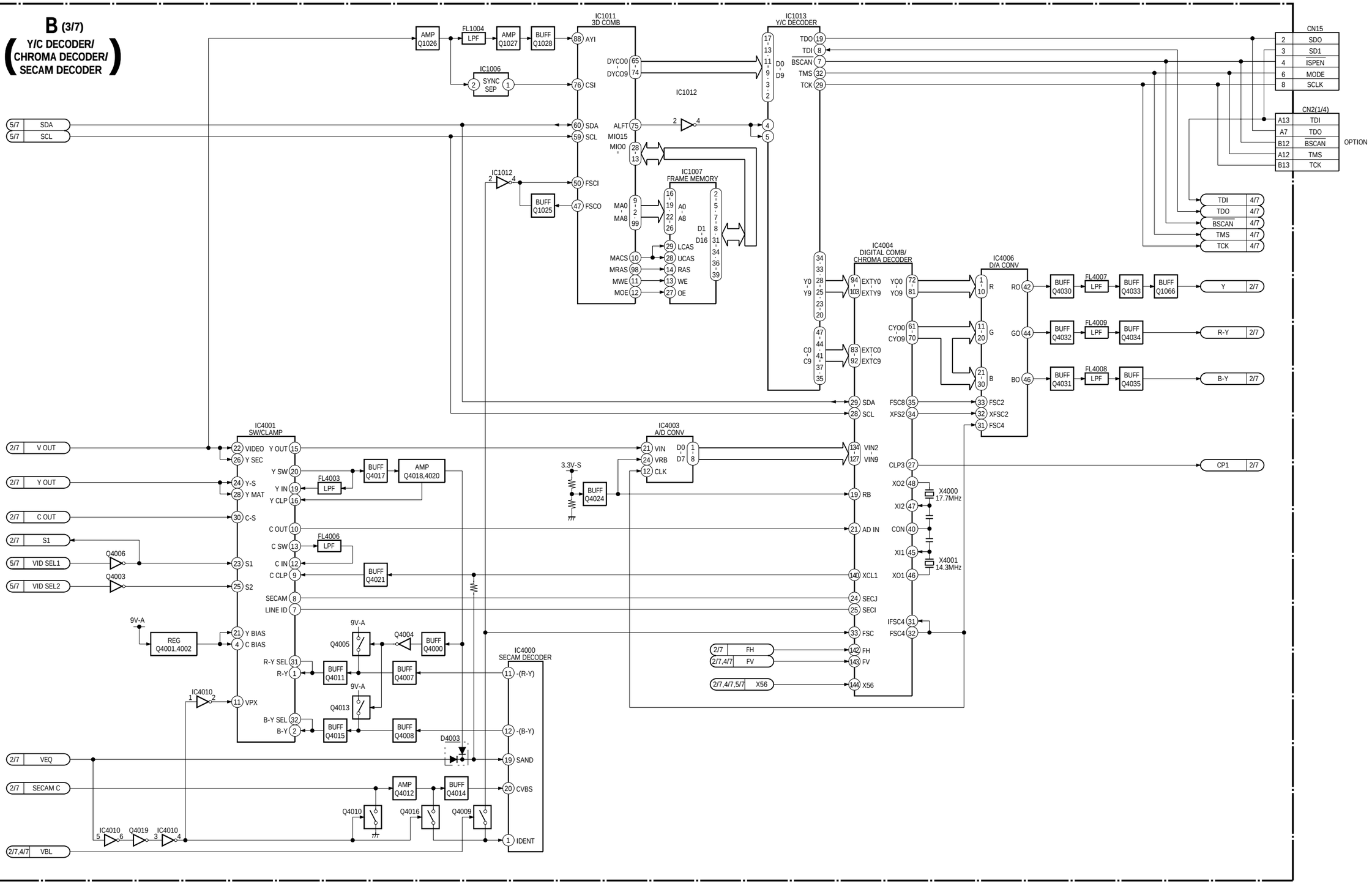
B (1/7) Block
UA (1/2) Block
UJ (1/3) Block
H1 (1/4), (2/4) Block

B (2/7), B1, UJ (2/3), H1 (3/4)



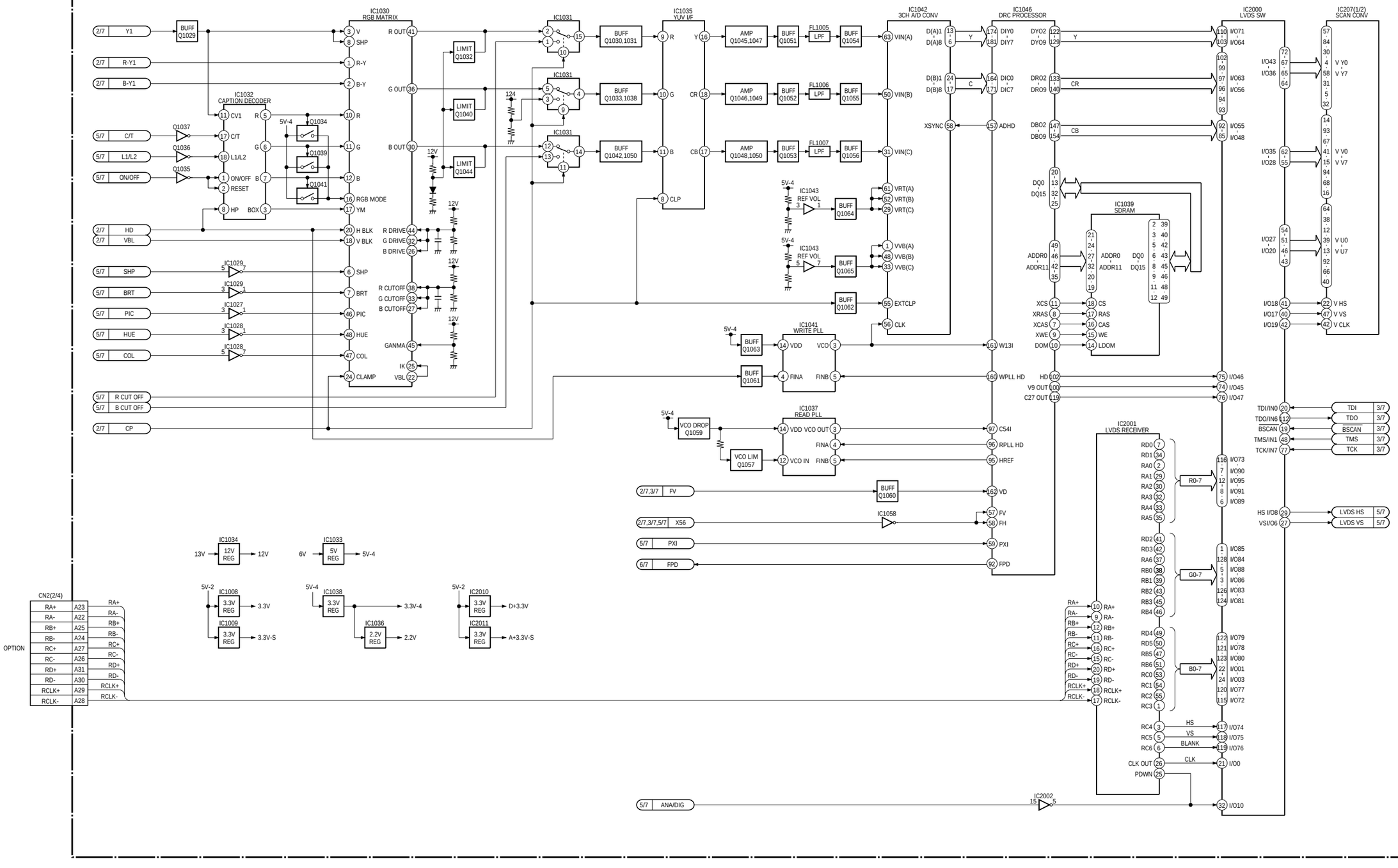
B (2/7) Block
B1 Block
UJ (2/3) Block
H1 (3/4) Block

B (3/7)
Y/C DECODER/ CHROMA DECODER/ SECAM DECODER



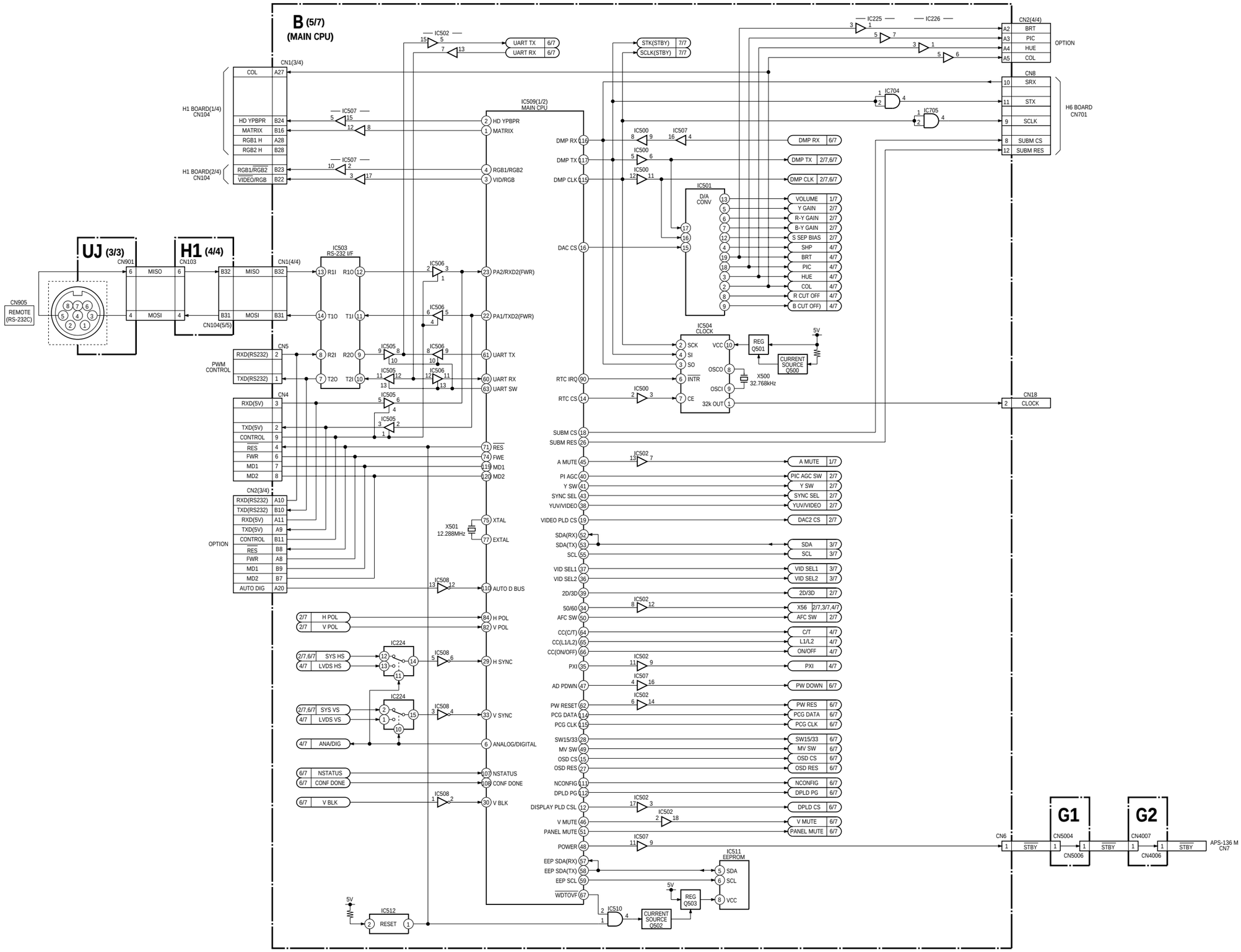
B (3/7) Block

B (4/7)
(RGB MATRIX/ DRC PROCESSOR/ LVDS SWITCH)

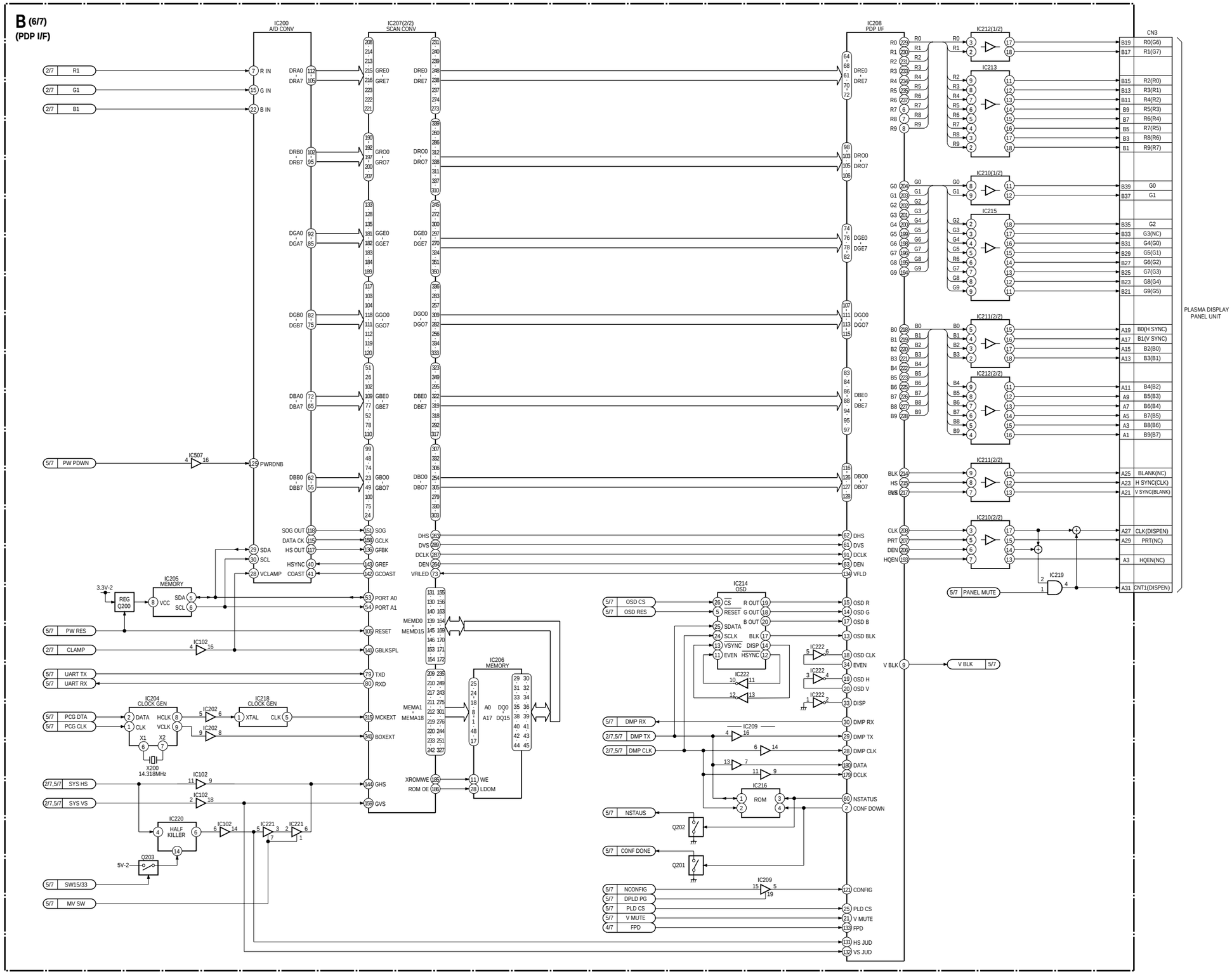


B (4/7) Block

B (5/7), H1 (4/4), UJ (3/3)

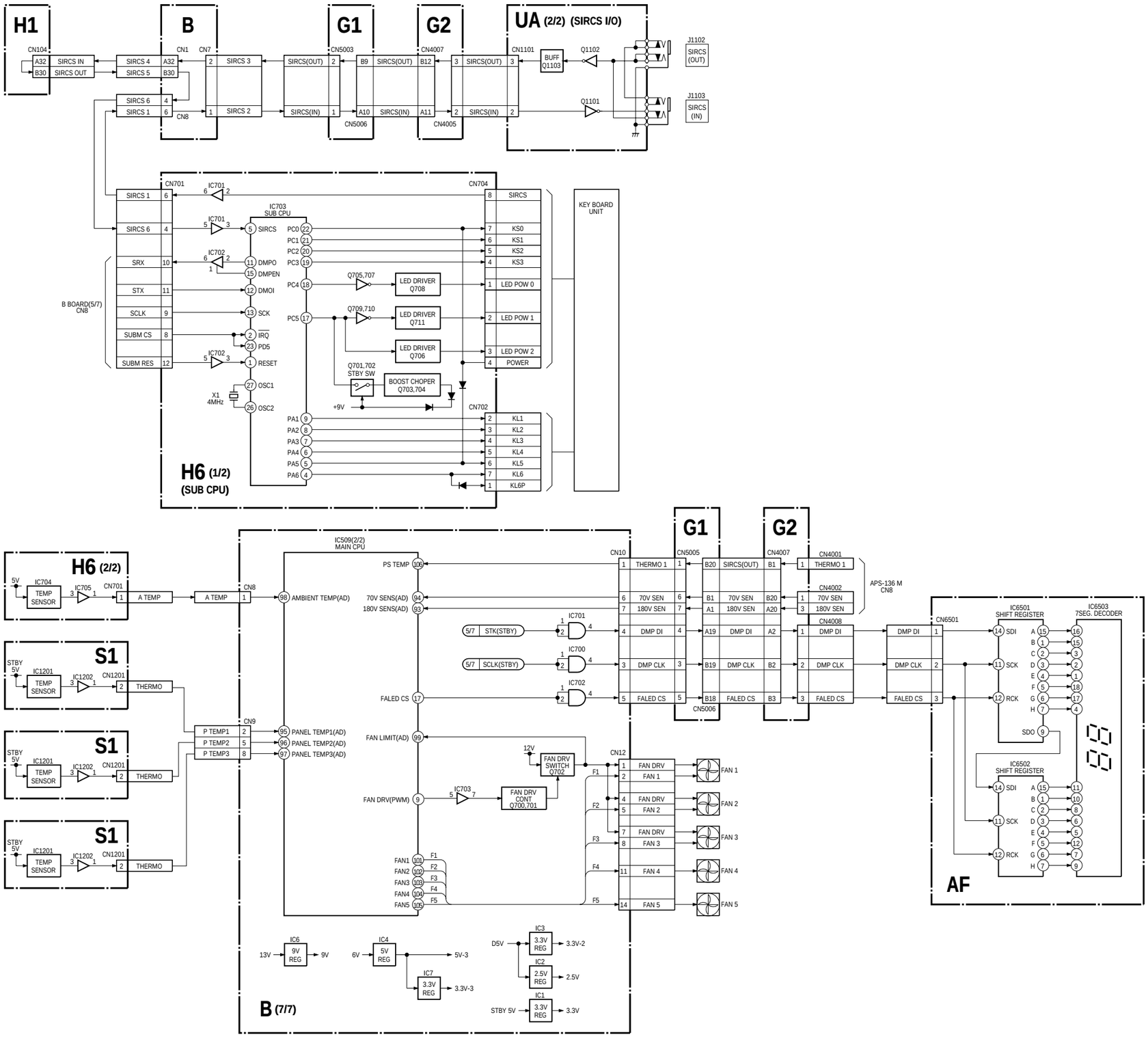


B (5/7) Block
H1 (4/4) Block
UJ (3/3) Block


B (6/7)
(PDP I/F)
IC200 A/D CONV
IC207(2/2) SCAN CONV
IC208 PDP I/F
CN3
PLASMA DISPLAY PANEL UNIT
IC212(1/2)
IC213
IC210(1/2)
IC215
IC211(2/2)
IC212(2/2)
IC211(2/2)
IC210(2/2)
IC219
IC205 MEMORY
IC206 MEMORY
IC214 OSD
IC204 CLOCK GEN
IC218 CLOCK GEN
IC220 HALF KILLER
IC216 ROM
IC209
IC222
X200 14.318MHz
R IN
G IN
B IN
PW PDWN
PW RES
CLAMP
UART TX
UART RX
PCG DTA
PCG CLK
SYS HS
SYS VS
SW15/33
MV SW
SOG
GCLK
GFBK
GREF
GCOAST
PORT A0
PORT A1
RESET
GBLKSPL
TXD
RXD
MCKEXT
BOXEXT
GHS
GVS
OSD CS
OSD RES
DMP RX
DMP TX
DMP CLK
NSTAUS
CONF DONE
NCONFIG
DPLD PG
PLD CS
V MUTE
FPD
HS JUD
VS JUD
V BLK
PANEL MUTE
R0(G6)
R1(G7)
R2(R0)
R3(R1)
R4(R2)
R5(R3)
R6(R4)
R7(R5)
R8(R6)
R9(R7)
G0
G1
G2
G3(NC)
G4(G0)
G5(G1)
G6(G2)
G7(G3)
G8(G4)
G9(G5)
B0(H SYNC)
B1(V SYNC)
B2(B0)
B3(B1)
B4(B2)
B5(B3)
B6(B4)
B7(B5)
B8(B6)
B9(B7)
BLANK(NC)
H SYNC(CLK)
V SYNC(BLANK)
CLK(DISPEN)
PRT(NC)
HQEN(NC)
CNT1(DISPEN)

B (6/7) Block

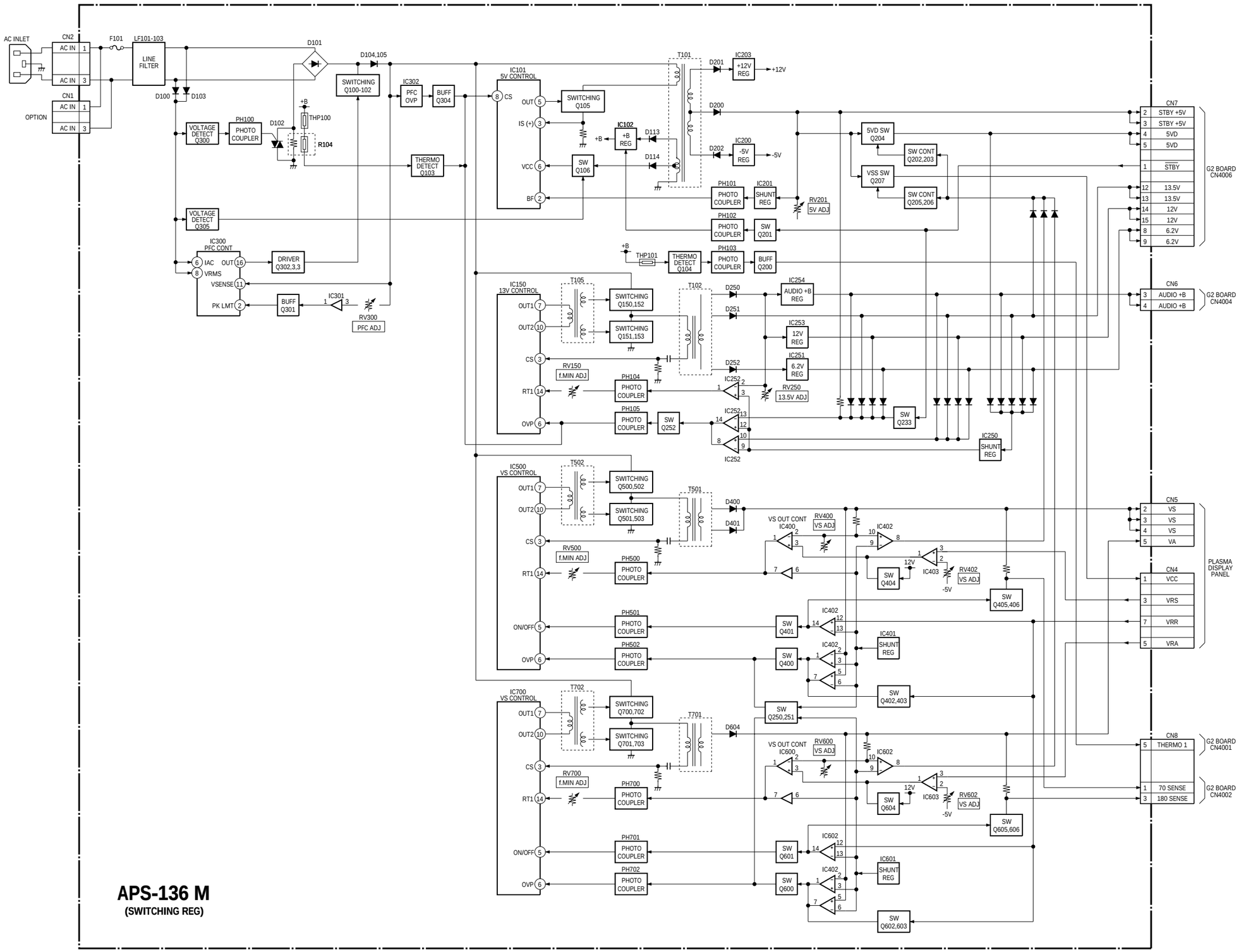
B (7/7), H6, AF, UA (2/2), S1



B (7/7) Block
H6 Block
AF Block
UA (2/2) Block
S1 Block

8-7

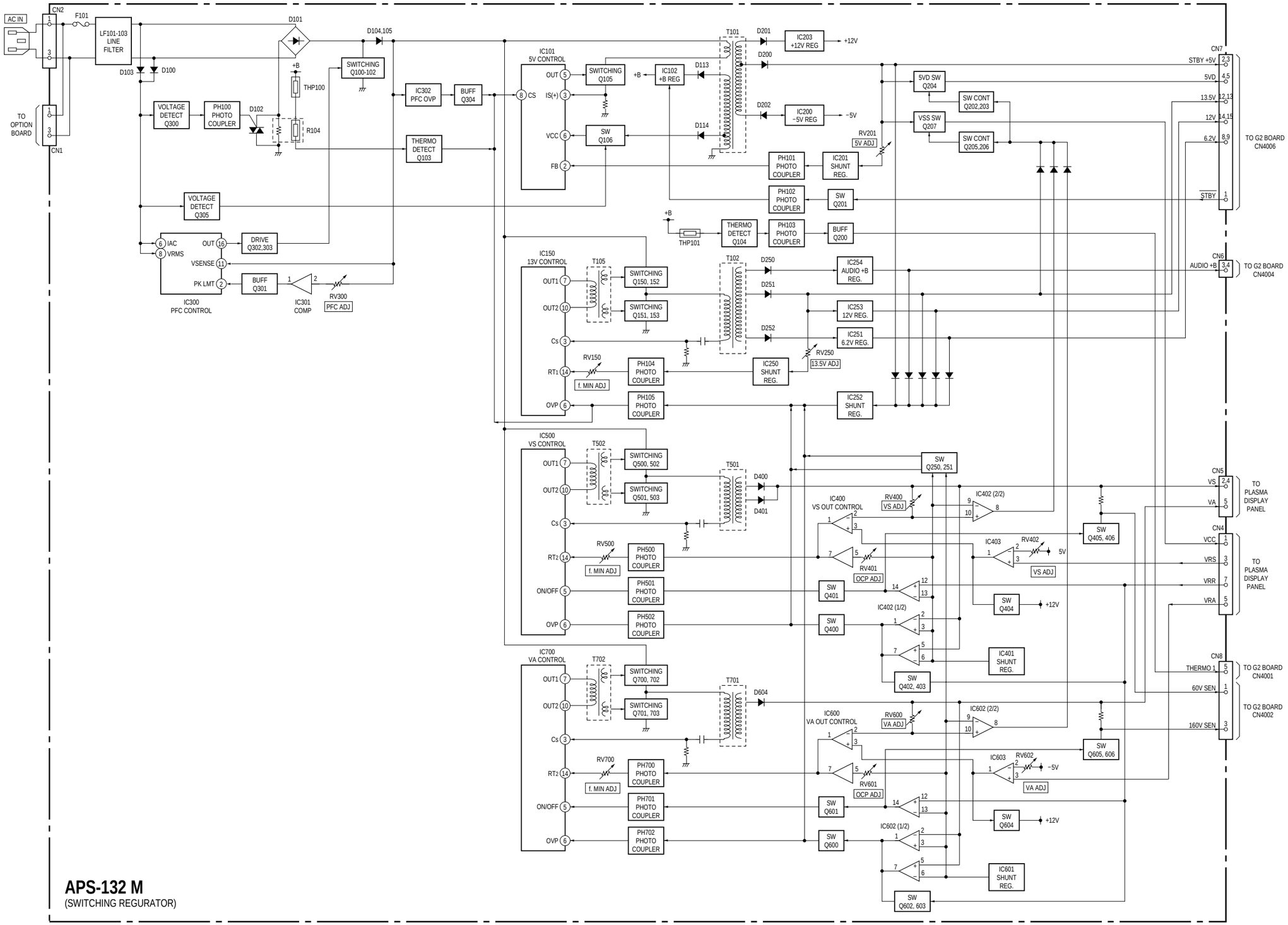
PFM-500A3W



APS-136 M
(SWITCHING REG)

APS-136 M Block

PFM-510A2W



APS-132 M
(SWITCHING REGURATOR)

APS-132 M Block

Section 9
Diagrams

Note:

- Parts marked " * " differ according to the model/destination. Refer to the mount table for each function.
- The parts marked " # " on schematic diagrams are not mounted.
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50 V unless otherwise specified.
- : fusible resistor
- : nonflammable resistor
- Δ : internal component
- : panel designation and adjustment for repair
- Caution when replacing chip parts
  New parts must be attached after removal of the chip.
  Be careful not to heat the minus side of a tantalum capacitor, because it is easily damaged by the heat.

Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

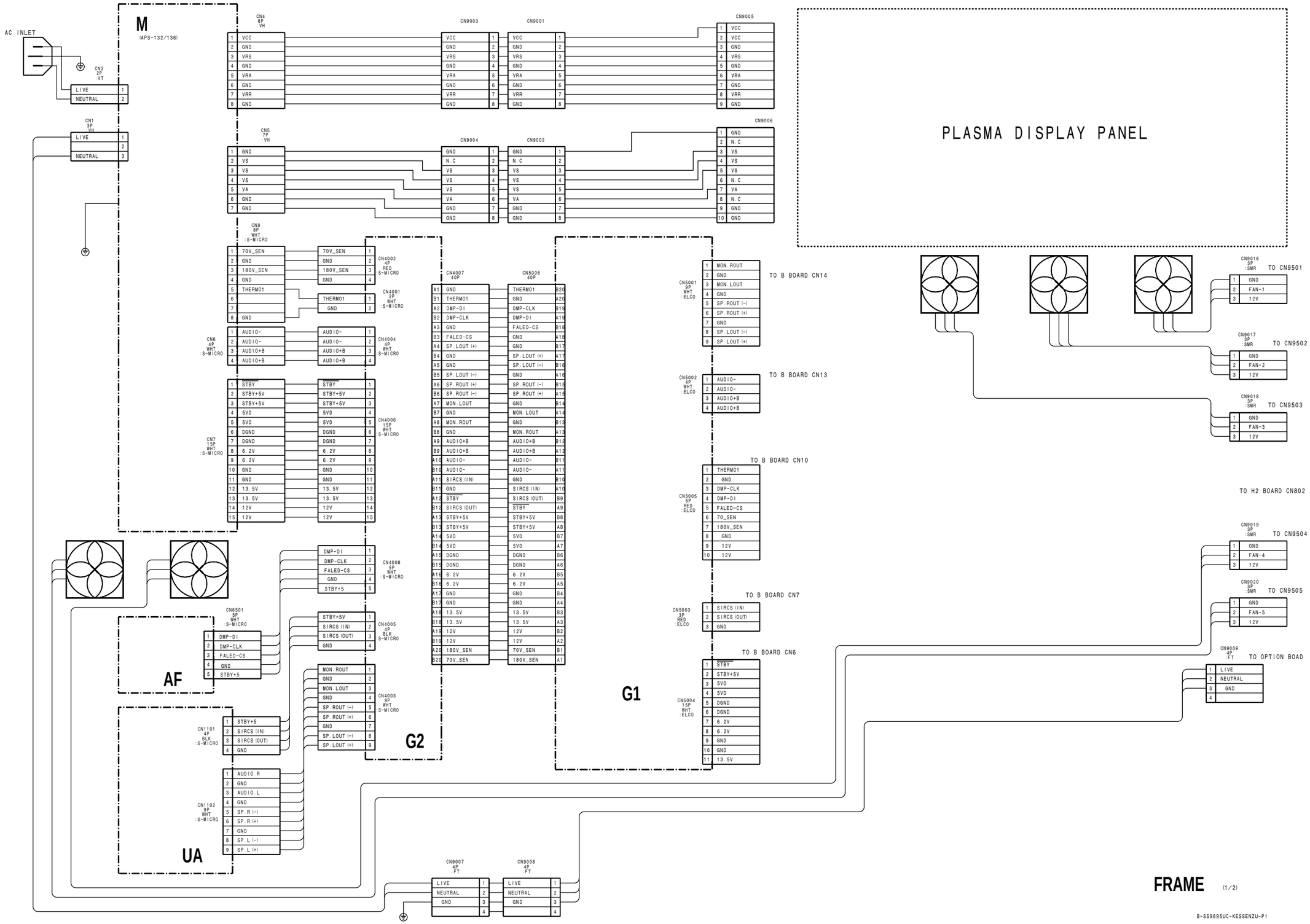
[Measuring conditions, voltage and waveform]

- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal and RGB color bar signal are received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- Unit of voltage is V (volt).
- : B+line
- : B– line
- Voltage variations may occur due to normal production tolerances.
- No mark : RGB color bar signal.
- ★ : Measurement disabled.
- Circled numbers indicate the reference waveform.
- : Signal path.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

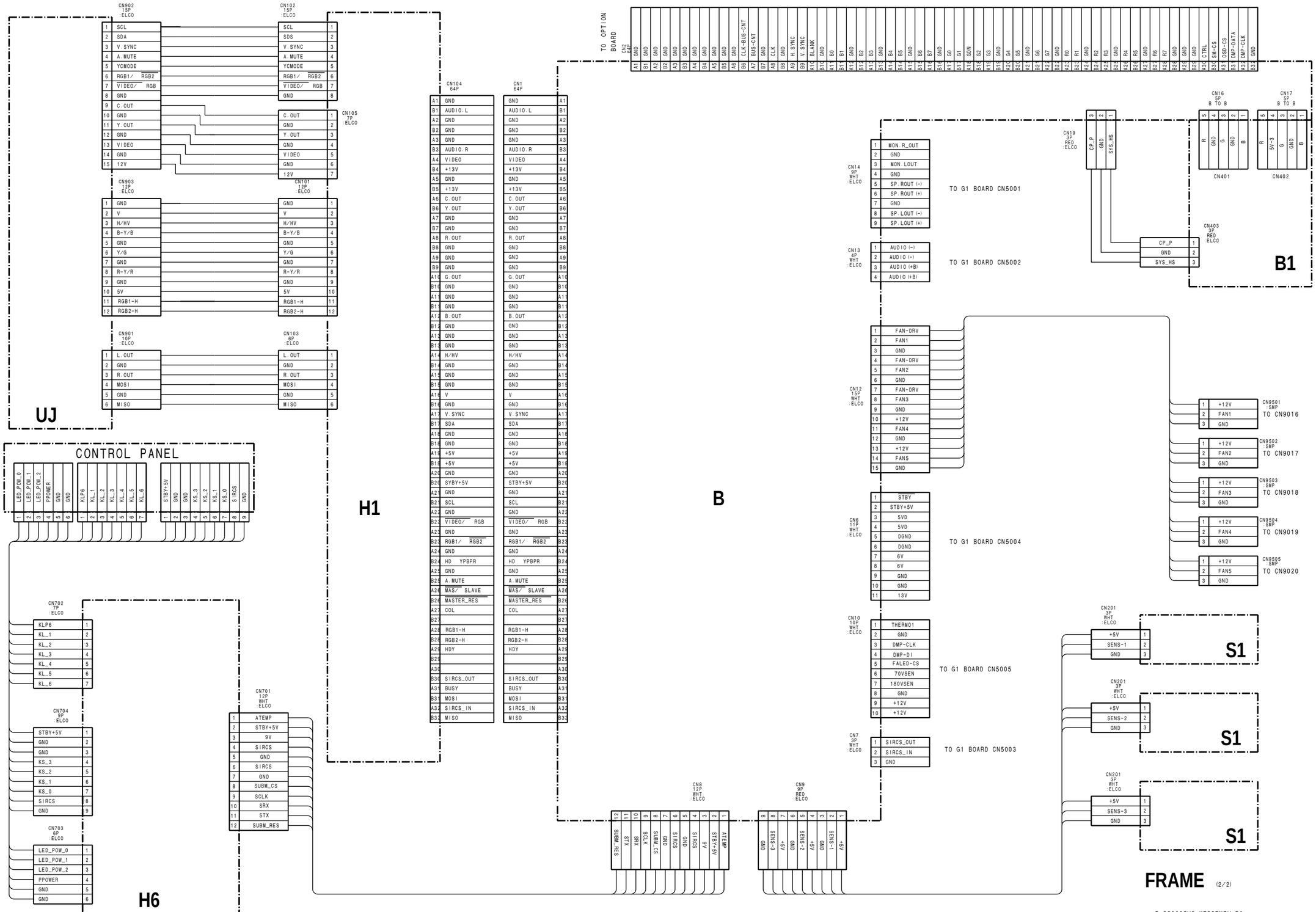
Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

9-1. Frame Schematic Diagrams

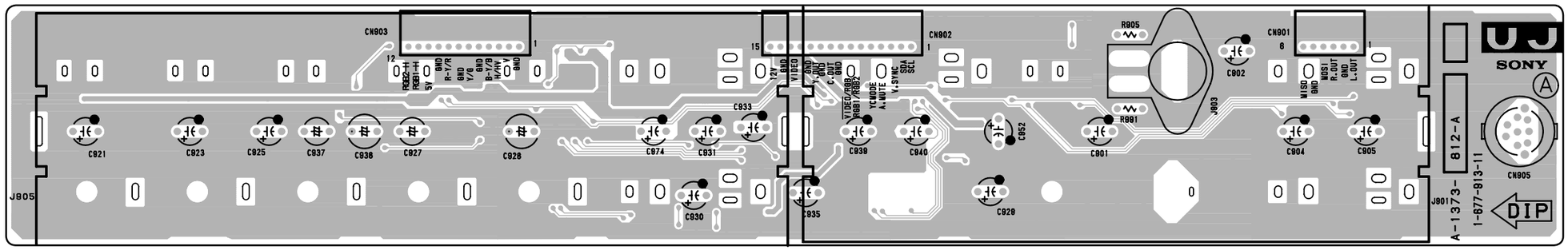


FRAME (1/2)

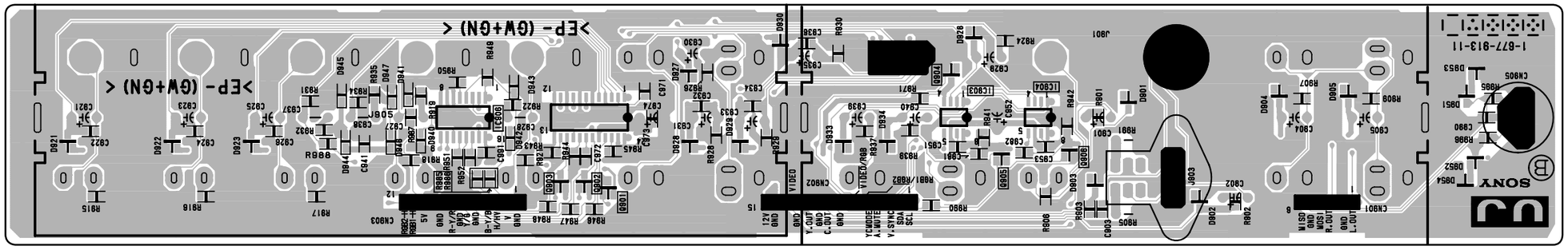
B-SS9695UC-KESSENZU-P1


UJ
CN902 15P :ELCO
CN102 15P :ELCO
SCL
SDA
V.SYNC
A.MUTE
YCMODE
RGB1/ RGB2
VIDEO/ RGB
GND
C.OUT
Y.OUT
VIDEO
12V
CN105 7P :ELCO
CN903 12P :ELCO
CN101 12P :ELCO
V
H/HV
B-Y/B
Y/G
R-Y/R
5V
RGB1-H
RGB2-H
CN901 10P :ELCO
CN103 6P :ELCO
L.OUT
R.OUT
MOSI
MISO
CONTROL PANEL
LED_POW_0
LED_POW_1
LED_POW_2
PPOWER
KLP6
KL_1
KL_2
KL_3
KL_4
KL_5
KL_6
STBY+5V
KS_3
KS_2
KS_1
KS_0
SIRCS
H1
H6
B
CN104 64P
CN1 64P
AUDIO.L
AUDIO.R
VIDEO
+13V
C.OUT
Y.OUT
R.OUT
G.OUT
B.OUT
H/HV
V.SYNC
SDA
SCL
HD YPBPR
A.MUTE
MAS/ SLAVE
MASTER_RES
COL
SIRCS_OUT
BUSY
SIRCS_IN
TO OPTION BOARD
CN2 80P
CLK-BUS-CNT
BUS-CNT
CLK
H.SYNC
V.SYNC
BLANK
B0
B1
B2
B3
R0
R1
R2
R3
R4
R5
R6
R7
G0
G1
G2
G3
G4
G5
G6
G7
CTRL
SW-CS
DMP-DATA
DMP-CLK
CN702 7P :ELCO
CN704 9P :ELCO
CN703 6P :ELCO
CN701 12P WHT :ELCO
ATEMP
9V
SUBM_CS
SCLK
SRX
STX
SUBM_RES
CN8 12P WHT :ELCO
CN9 9P RED :ELCO
SENS-3
SENS-2
SENS-1
CN14 9P WHT :ELCO
MON.R_OUT
MON.LOUT
SP.ROUT (-)
SP.ROUT (+)
SP.LOUT (-)
SP.LOUT (+)
TO G1 BOARD CN5001
CN13 4P WHT :ELCO
AUDIO (-)
AUDIO (+)
TO G1 BOARD CN5002
CN19 3P RED :ELCO
CP_P
SYS_HS
CN16 5P B TO B
CN17 5P B TO B
CN401
CN402
CN403 3P RED :ELCO
B1
CN12 15P WHT :ELCO
FAN-DRV
FAN1
FAN2
FAN3
FAN4
FAN5
CN9501 :SMP
CN9502 :SMP
CN9503 :SMP
CN9504 :SMP
CN9505 :SMP
TO CN9016
TO CN9017
TO CN9018
TO CN9019
TO CN9020
CN6 11P WHT :ELCO
STBY
5VD
DGND
6V
13V
TO G1 BOARD CN5004
CN10 10P WHT :ELCO
THERMO1
DMP-CLK
DMP-DI
FALED-CS
70VSEN
180VSEN
TO G1 BOARD CN5005
CN7 3P WHT :ELCO
TO G1 BOARD CN5003
CN201 3P WHT :ELCO
SENS-1
SENS-2
SENS-3
S1
FRAME (2/2)
B-SS9695UC-KESSENZU-P2

9-2. Schematic Diagrams and Printed Wiring Boards

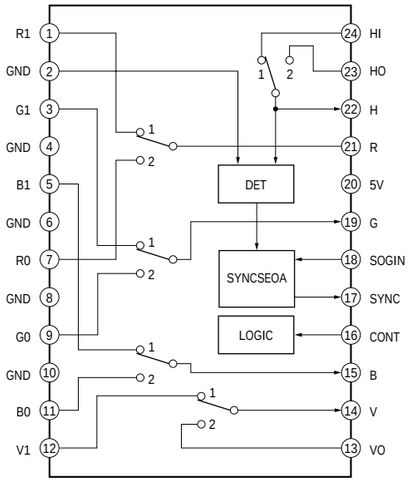


UJ -A SIDE-
SUFFIX: -11

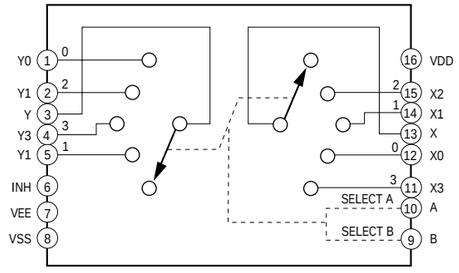


UJ -B SIDE-
SUFFIX: -11

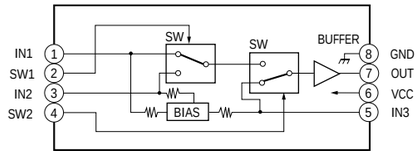
BA7657F-E2 (IC905)

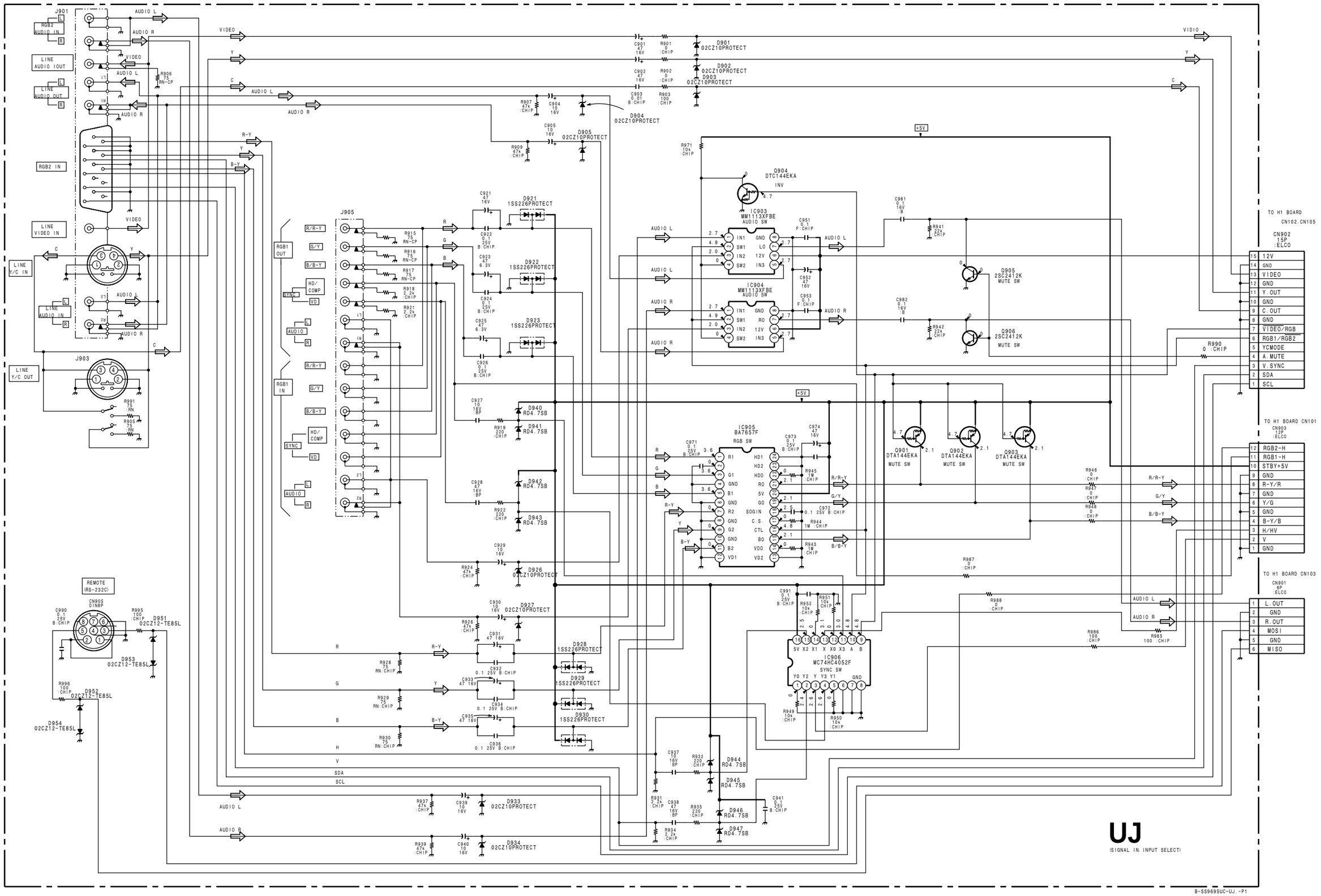


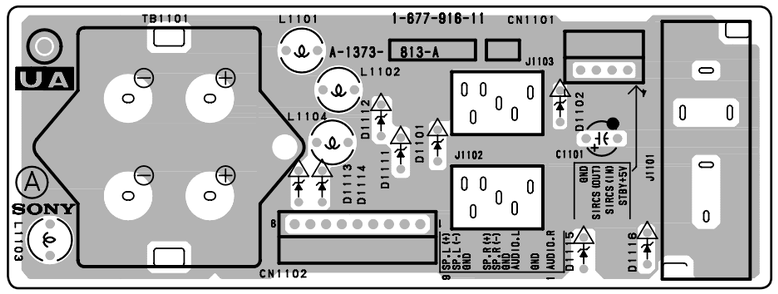
MC74HC4052F-T2 (IC906)



MM1113XFBE (IC903, IC904)

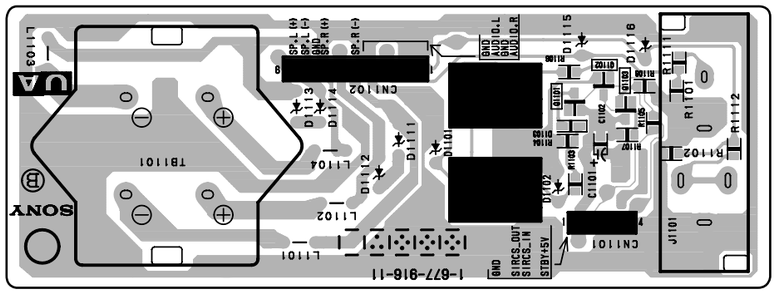



J901
AUDIO L
AUDIO R
VIDEO
RGB2 AUDIO IN
LINE AUDIO IOUT
LINE AUDIO OUT
R906 75 RN-CP
RGB2 IN
LINE VIDEO IN
LINE Y/C IN
LINE AUDIO IN
J903
LINE Y/C OUT
R991 75 RN
R905 75 RN
REMOTE (RS-232C)
CN905 DIN8P
C990 0.1 25V B:CHIP
R995 100 :CHIP
D951 02CZ12-TE85L
D953 02CZ12-TE85L
R996 100 :CHIP
D952 02CZ12-TE85L
D954 02CZ12-TE85L
R-Y
B-Y
J905
R915 75 RN-CP
R916 75 RN-CP
R917 75 RN-CP
R918 2.2k :CHIP
R921 2.2k :CHIP
RGB1 OUT
RGB1 IN
R/R-Y
G/Y
B/B-Y
HD/ COMP
SYNC
VD
AUDIO
L
R
C901 47 16V
R901 0 :CHIP
D901 02CZ10PROTECT
C902 47 16V
R902 0 :CHIP
D902 02CZ10PROTECT
C903 0.01 B:CHIP
R903 100 :CHIP
D903 02CZ10PROTECT
R907 47k :CHIP
C904 10 16V
D904 02CZ10PROTECT
C905 10 16V
D905 02CZ10PROTECT
R909 47k :CHIP
C921 47 16V
D921 1SS226PROTECT
C922 0.1 25V B:CHIP
C923 47 6.3V
D922 1SS226PROTECT
C924 0.1 25V B:CHIP
C925 47 6.3V
D923 1SS226PROTECT
C926 0.1 25V B:CHIP
C927 10 16V :BP
D940 RD4.7SB
R919 220 :CHIP
D941 RD4.7SB
C928 47 16V :BP
D942 RD4.7SB
R922 220 :CHIP
D943 RD4.7SB
C929 10 16V
R924 47k :CHIP
D926 02CZ10PROTECT
C930 10 16V
D927 02CZ10PROTECT
R926 47k :CHIP
C931 47 16V
D928 1SS226PROTECT
R928 75 RN:CHIP
C932 0.1 25V B:CHIP
C933 47 16V
D929 1SS226PROTECT
R929 75 RN:CHIP
C934 0.1 25V B:CHIP
C935 47 16V
D930 1SS226PROTECT
R930 75 RN:CHIP
C936 0.1 25V B:CHIP
H
V
SDA
SCL
AUDIO L
AUDIO R
R937 47k :CHIP
C939 10 16V
D933 02CZ10PROTECT
R939 47k :CHIP
C940 10 16V
D934 02CZ10PROTECT
+5V
R971 10k :CHIP
Q904 DTC144EKA INV
IC903 MM1113XFBE AUDIO SW
C951 0.1 F:CHIP
C952 47 16V
IC904 MM1113XFBE AUDIO SW
C953 0.1 F:CHIP
C981 0.1 16V :B
R941 221 :CHIP
Q905 2SC2412K MUTE SW
C982 0.1 16V :B
R942 221 :CHIP
Q906 2SC2412K MUTE SW
R990 0 :CHIP
IC905 BA7657F RGB SW
C971 0.1 25V B:CHIP
C973 0.1 25V B:CHIP
C974 47 16V
R945 1M :CHIP
C972 0.1 25V B:CHIP
R944 1M :CHIP
R943 1M :CHIP
Q901 DTA144EKA MUTE SW
Q902 DTA144EKA MUTE SW
Q903 DTA144EKA MUTE SW
R946 0 :CHIP
R947 0 :CHIP
R948 0 :CHIP
R987 0 :CHIP
C991 0.1 25V B:CHIP
R951 10k :CHIP
R952 10k :CHIP
IC906 MC74HC4052F SYNC SW
R949 10k :CHIP
R950 10k :CHIP
R988 0 :CHIP
R986 100 :CHIP
R985 100 :CHIP
C937 10 16V :BP
R932 220 :CHIP
D944 RD4.7SB
D945 RD4.7SB
R931 2.2k :CHIP
C938 47 16V :BP
R935 220 :CHIP
C941 0.1 25V B:CHIP
D946 RD4.7SB
D947 RD4.7SB
R934 2.2k :CHIP
VIDIO
Y
C
R-Y
B-Y
R
G
B
H
V
SDA
SCL
TO H1 BOARD CN102.CN105
CN902 15P :ELCO
15 12V
14 GND
13 VIDEO
12 GND
11 Y.OUT
10 GND
9 C.OUT
8 GND
7 VIDEO/RGB
6 RGB1/RGB2
5 YCMODE
4 A.MUTE
3 V.SYNC
2 SDA
1 SCL
TO H1 BOARD CN101
CN903 12P :ELCO
12 RGB2-H
11 RGB1-H
10 STBY+5V
9 GND
8 R-Y/R
7 GND
6 Y/G
5 GND
4 B-Y/B
3 H/HV
2 V
1 GND
TO H1 BOARD CN103
CN901 6P :ELCO
1 L.OUT
2 GND
3 R.OUT
4 MOSI
5 GND
6 MISO
UJ
(SIGNAL IN. INPUT SELECT)
B-SS9695UC-UJ.-P1



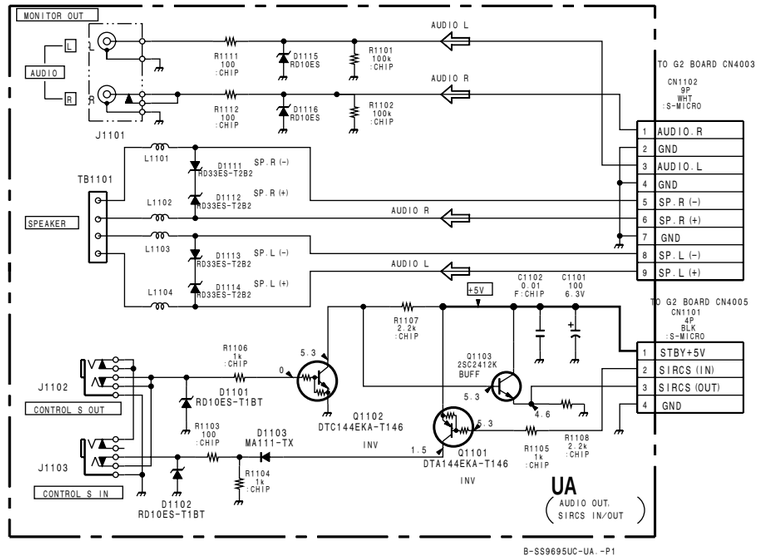
UA -A SIDE-

SUFFIX: -11

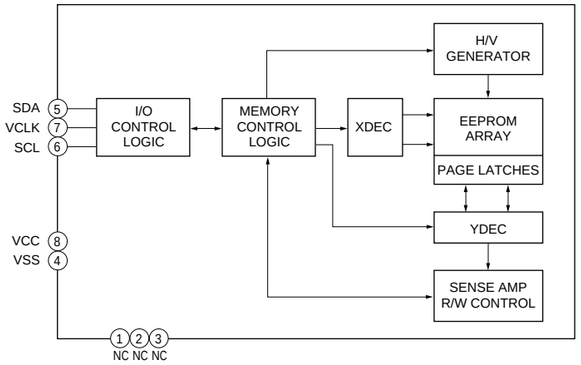


UA -B SIDE-

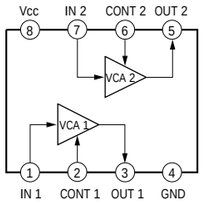
SUFFIX: -11



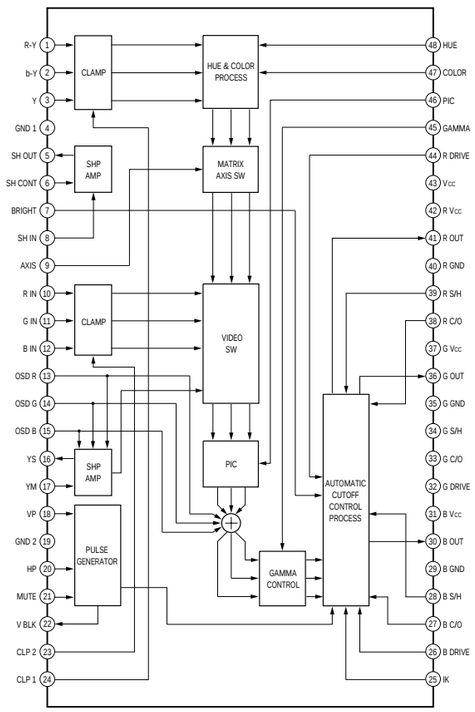
24LC21T/SN (IC103)



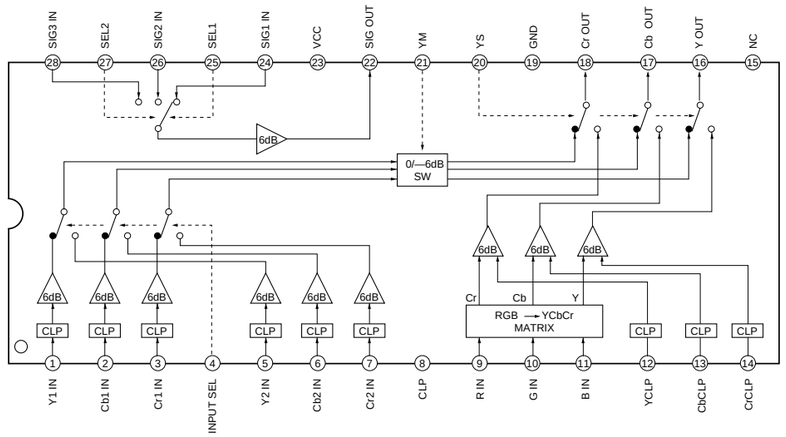
CXA1211M-T4 (IC1005, 1000, IC1001)



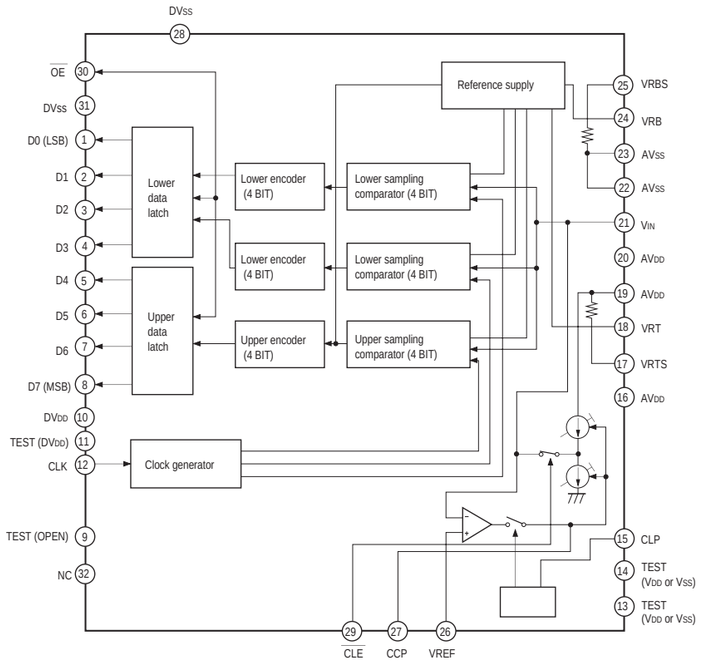
CXA1739S (IC1030)



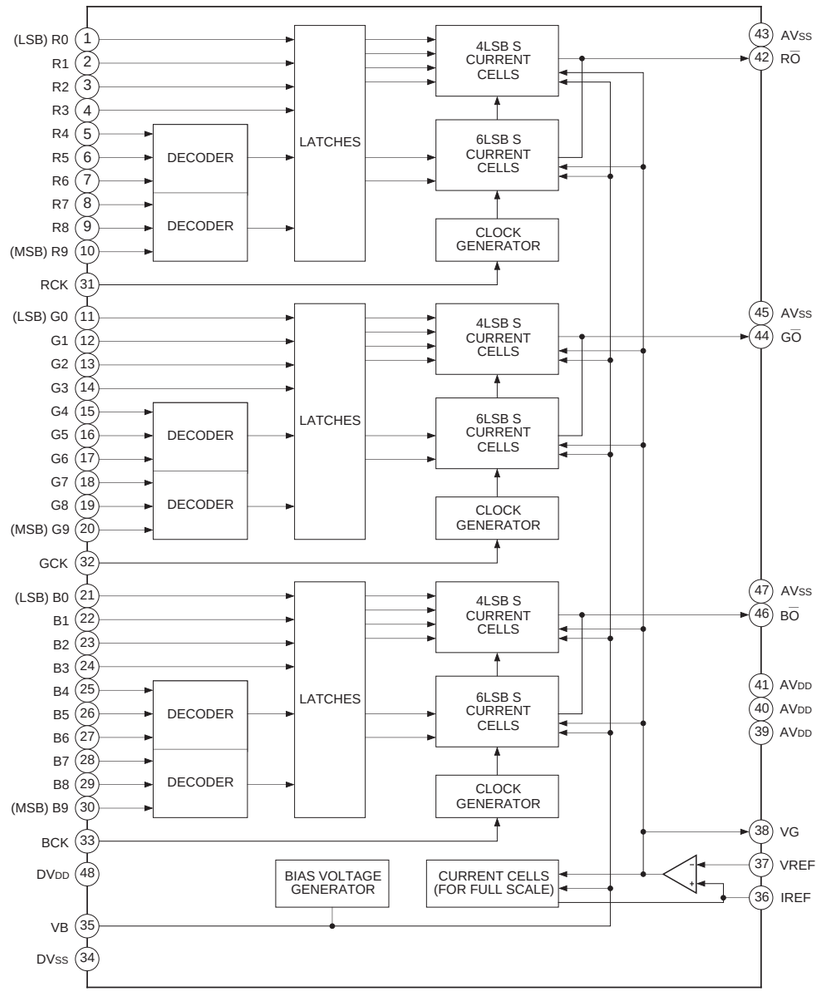
CXA2119M-T6 (IC1035)



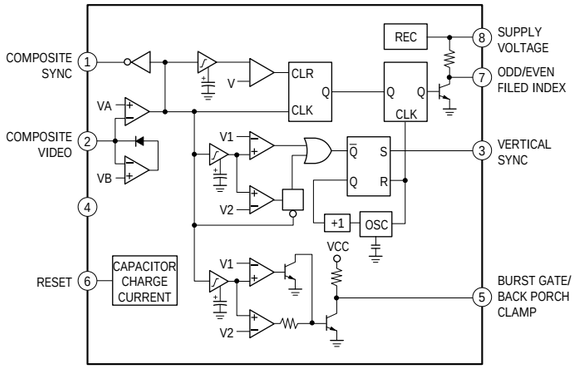
CXD2300Q-T4 (IC4003)



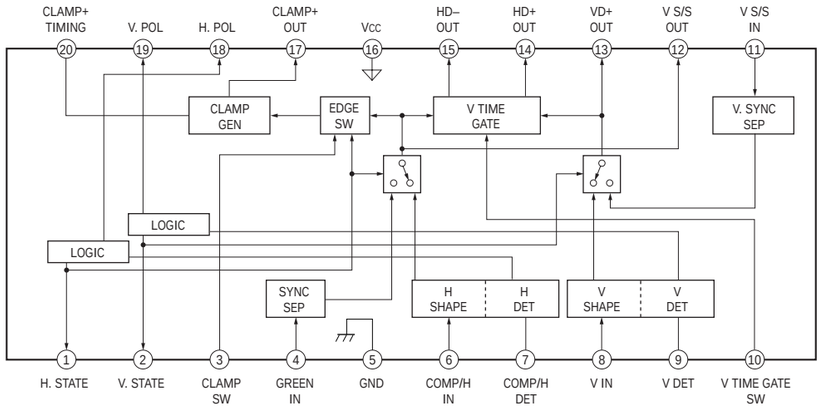
CXD2309Q-T6 (IC4006)



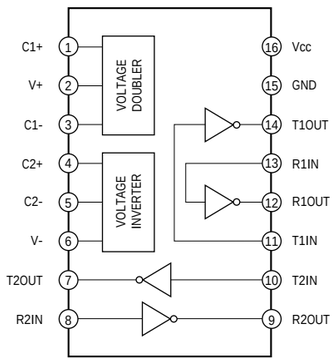
LM1881MX (IC1006)



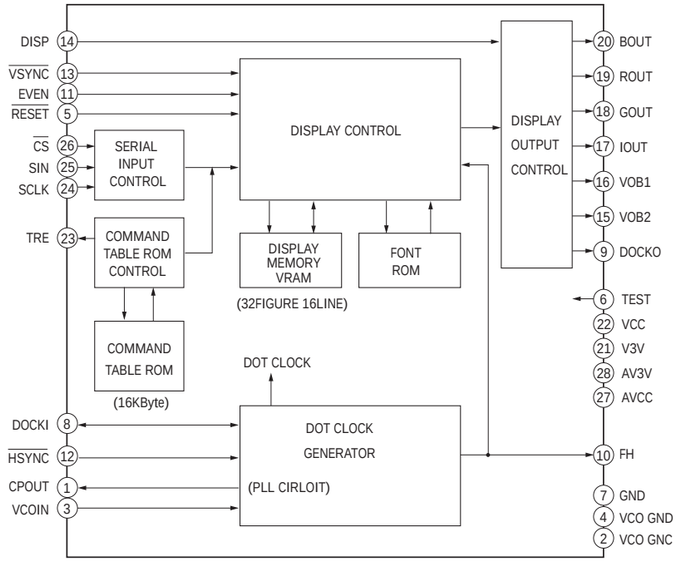
M52347FP-TE (IC101)



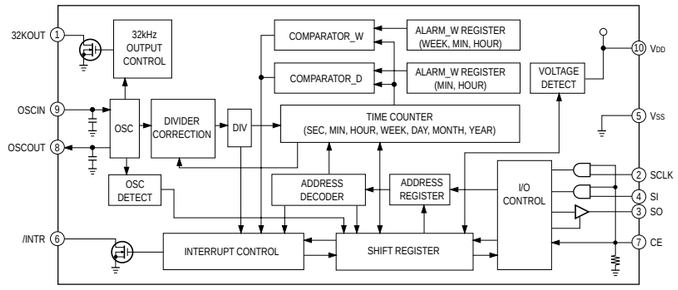
MAX202CSE-T (IC503)



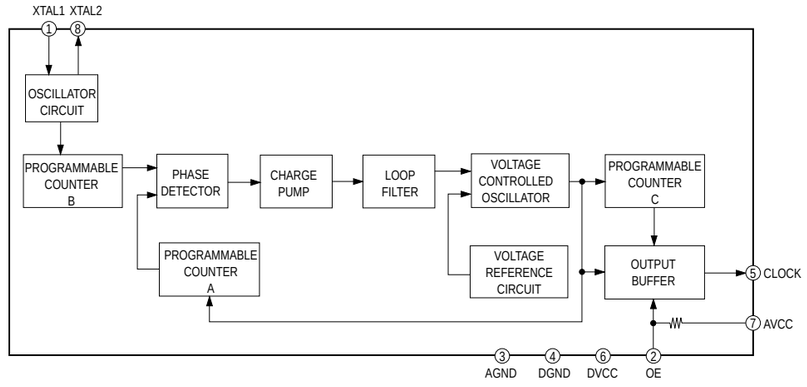
MB90096PF-G-182-BND-ER (IC214)



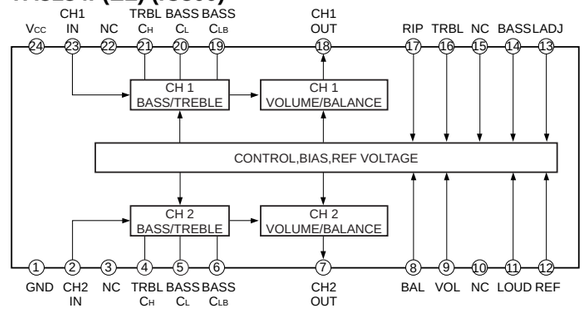
RS5C348A-E2 (IC504)



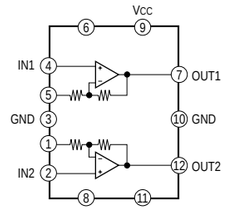
ST49C101ACF8-05-TR (IC218)



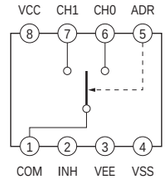
TA8184F(EL) (IC800)



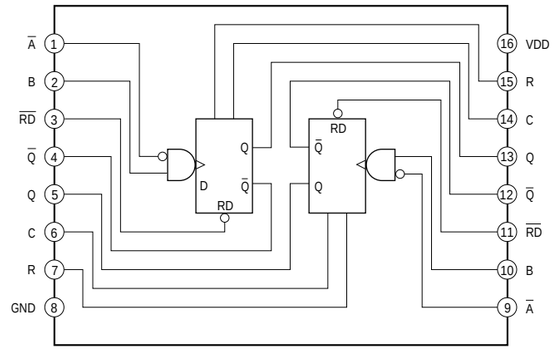
TA8216H (IC801)



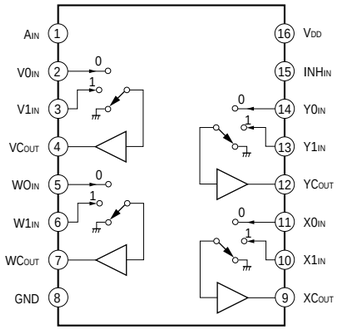
TC4W53FU(TE12R) (IC1004, IC1044)



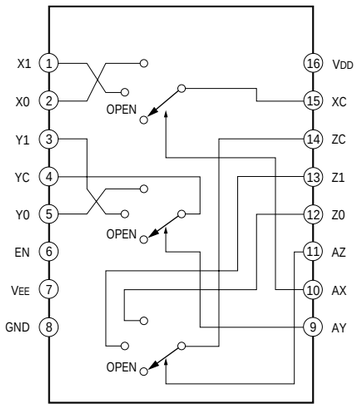
TC74HC123AF(EL) (IC4008, IC4009, IC4011)



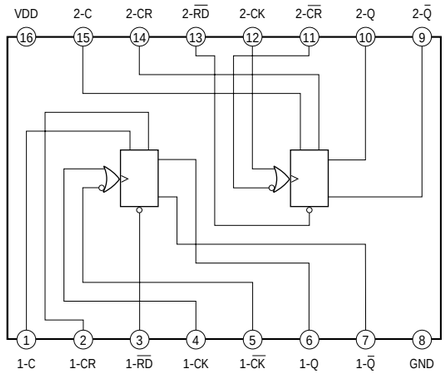
TC74HC157AF(EL) (IC4012)



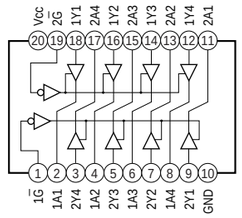
TC74HC4053AF(EL)
(IC100, IC1002, IC1003, IC224, IC1031)



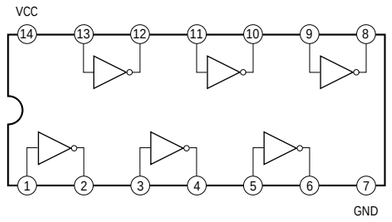
TC74HC4538AF(EL) (IC220)



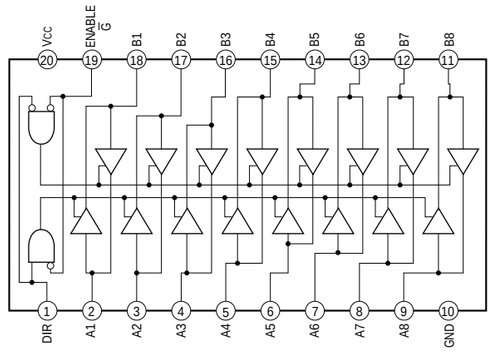
TC74LCX244F(EL) (IC102)



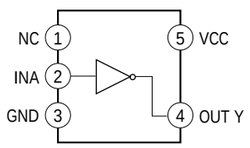
TC74VHCT04AF(EL) (IC222)



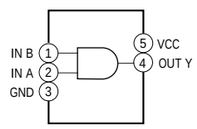
TC74VHCT245AFT(EL)
(IC210, IC211, IC212, IC213, IC215)



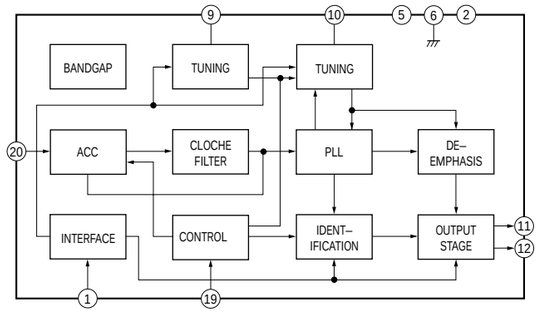
TC7S04FU(TE85R) (IC223)



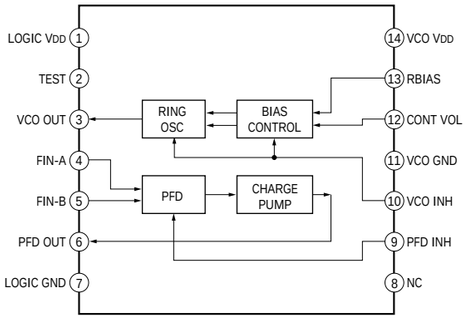
TC7S08FU(TE85R) (IC219)



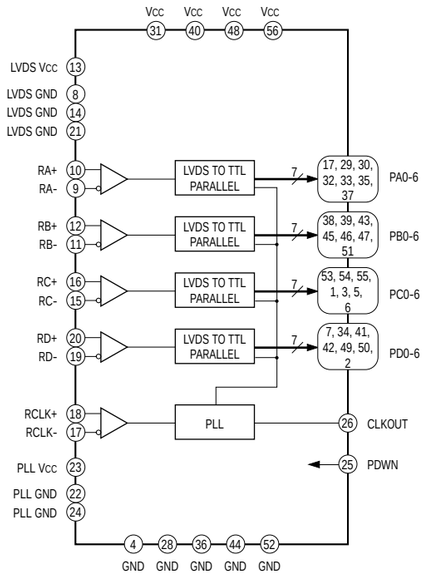
TDA8395T/N3 (IC4000)



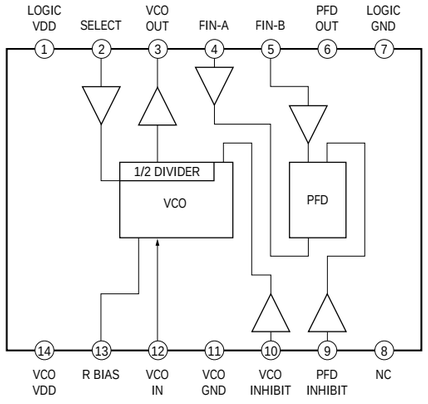
TLC2933IPWR (IC1037)



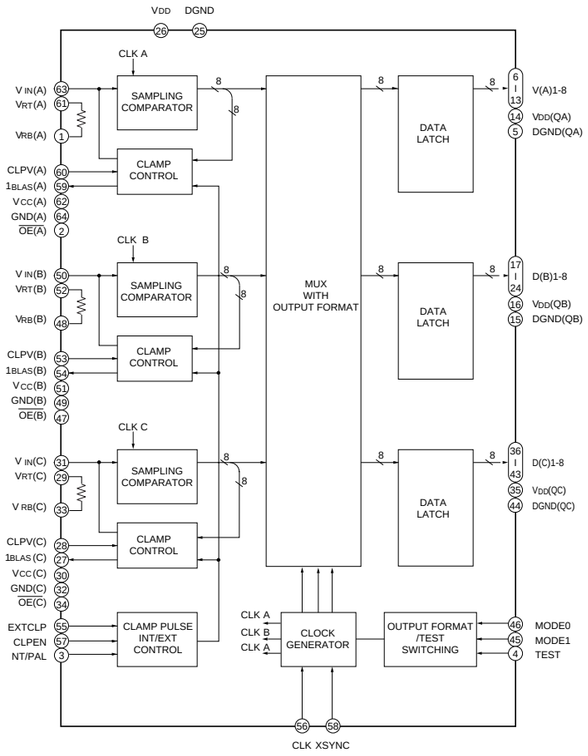
THC63LVDF84A-T (IC2001)



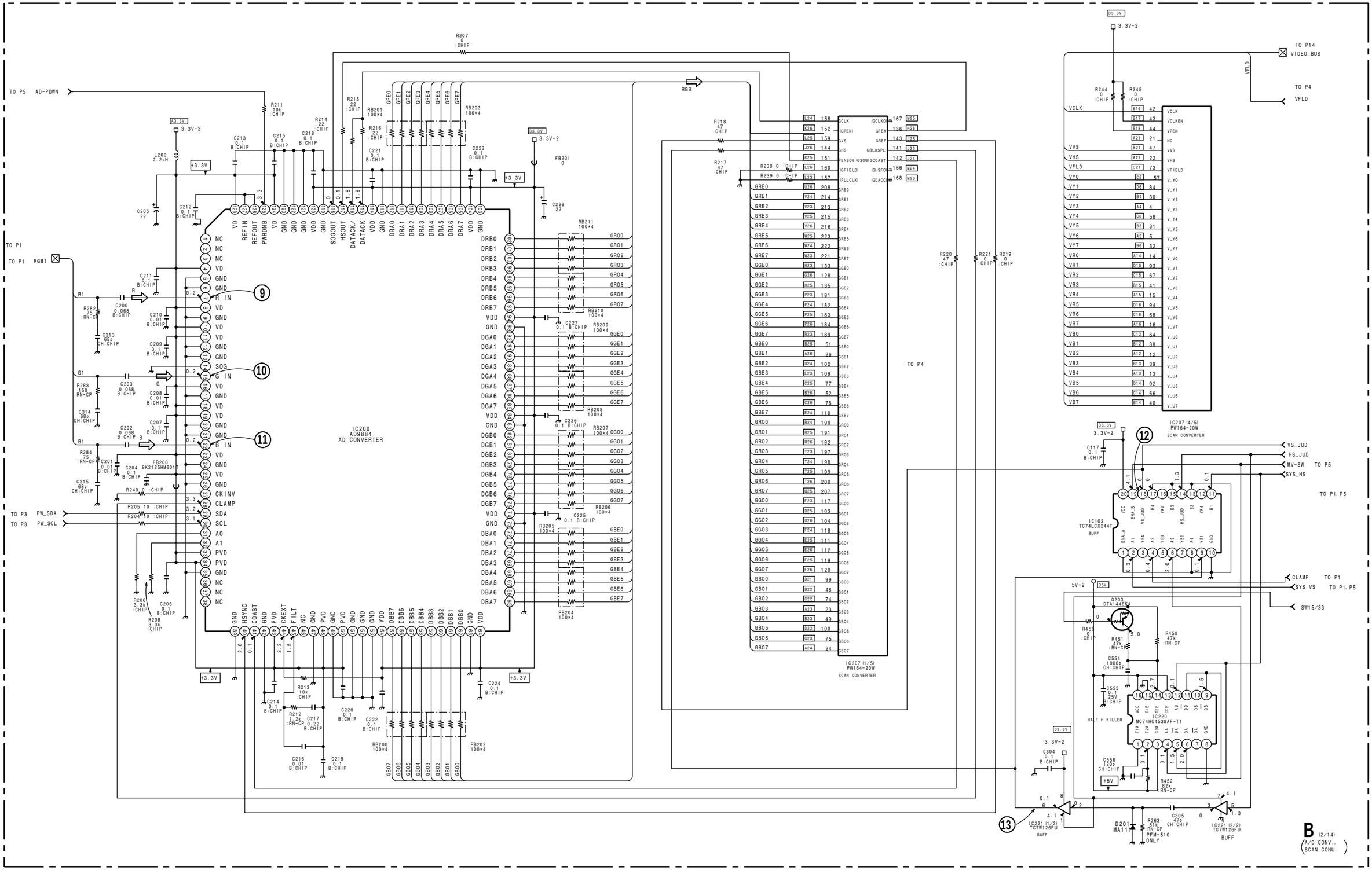
TLC2932IPW-E20 (IC1041)

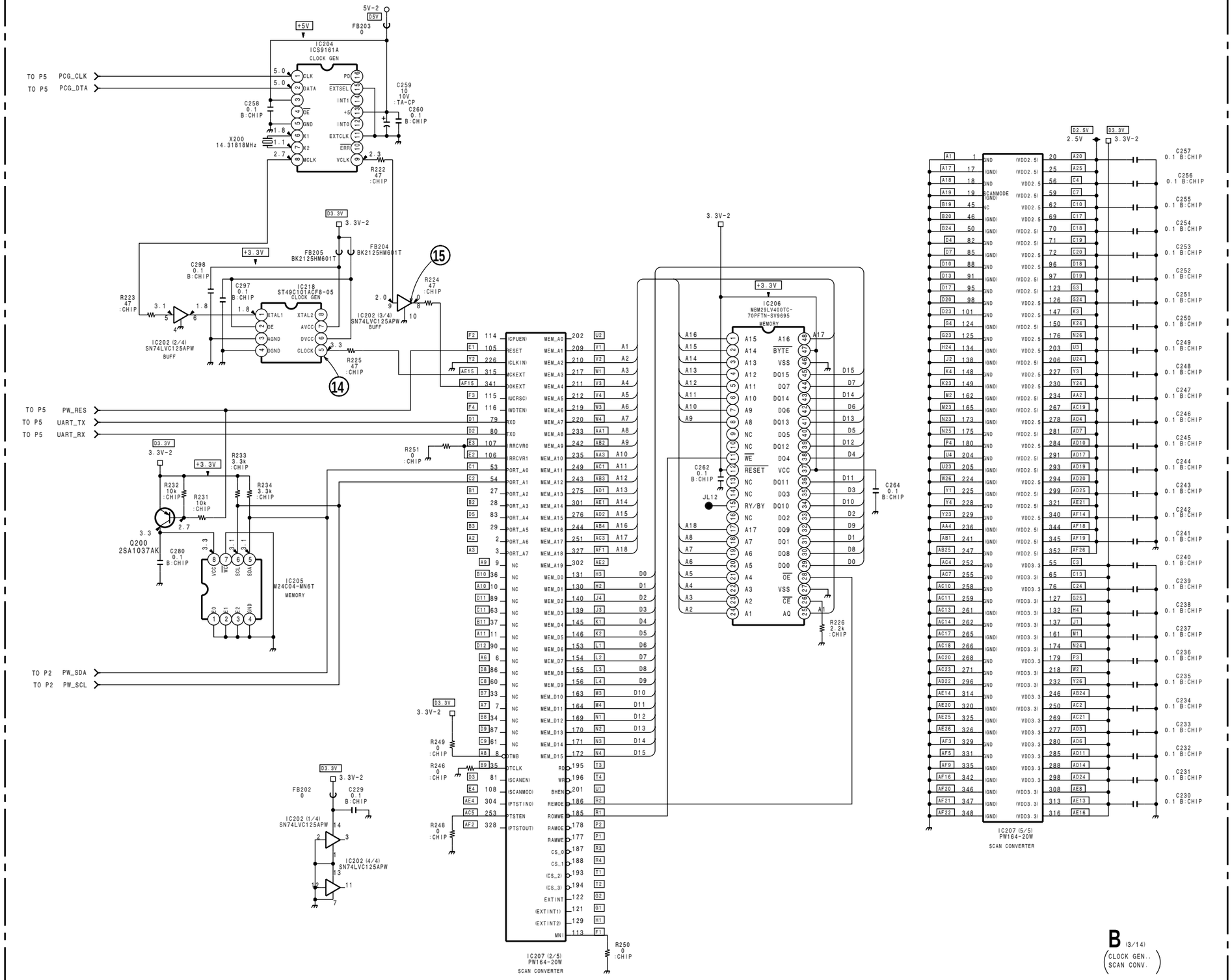


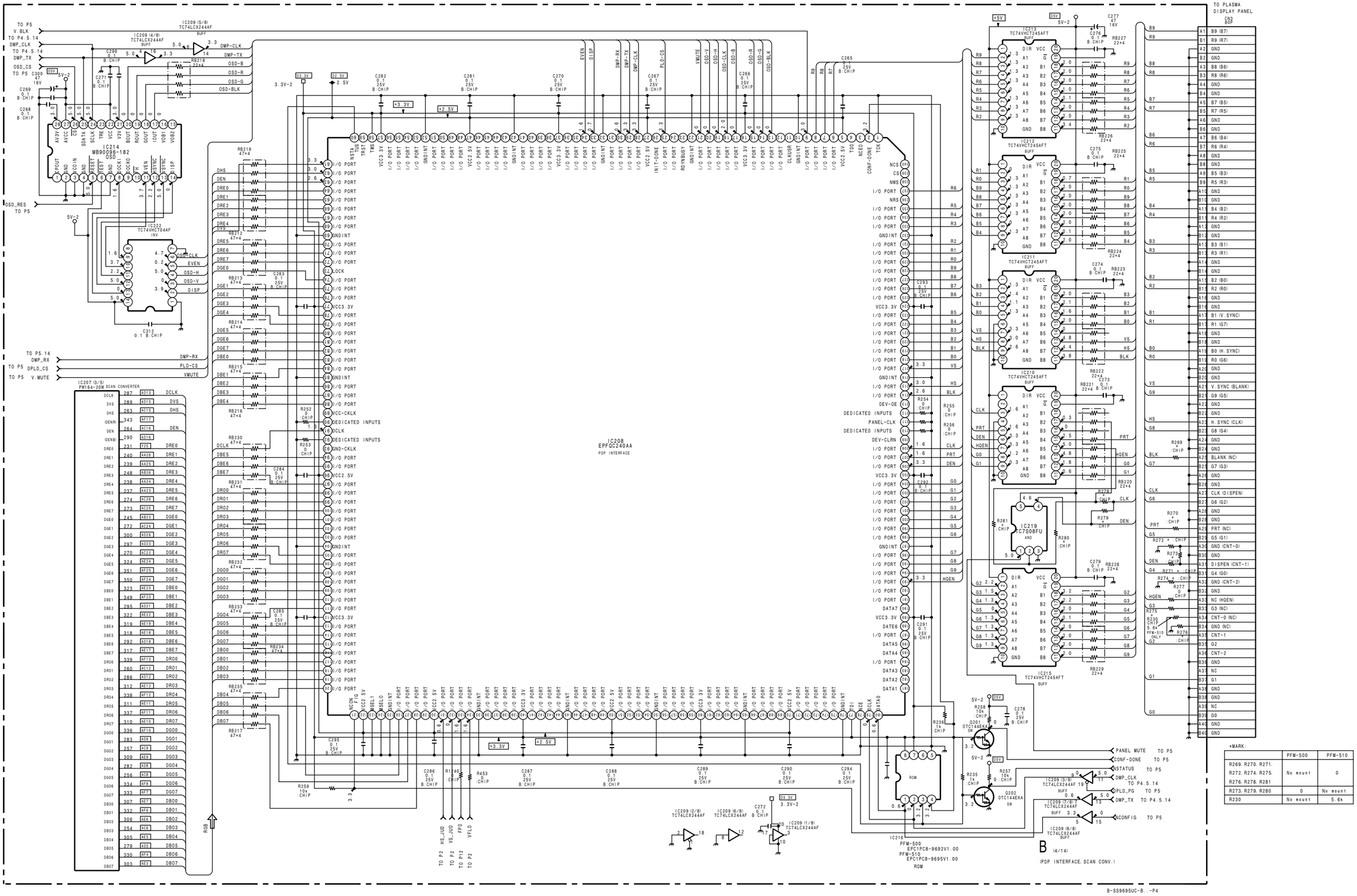
TLC5733AIPM (IC1042)



TO H1 BOARD CN104
CN1
64P
BTOB
GND A1
AUDIO.L B1
GND A2
GND B2
GND A3
AUDIO.R B3
VIDEO A4
+13V B4
GND A5
+13V B5
C.OUT A6
Y.OUT B6
GND A7
GND B7
R.OUT A8
GND B8
GND A9
GND B9
G.OUT A10
GND B10
GND A11
GND B11
B.OUT A12
GND B12
GND A13
GND B13
H/HV A14
GND B14
GND A15
GND B15
V A16
MATRIX B16
V.SYNC A17
SDA B17
GND A18
GND B18
+5V A19
+5V B19
GND A20
STBY+5V B20
GND A21
SCL B22
GND A22
VIDEO/RGB B22
GND A23
RGB2 RGB1/ B23
GND A24
HD YPBPR B24
GND A25
A.MUTE B25
SLAVE MAS/ A26
MASTER RES B26
COL A27
B27
RGB1-H A28
RGB2-H B28
HDY (SOG) A29
B29
A30
SIRCS5 B30
BUSY A31
MOSI B31
SIRCS4 A32
MISO B32
S.SEP_BIAS
TO P5 SYNC_SEL
TO P7.10 13V
TO P7 AUDIO.L
TO P7 AUDIO.R
AUDIO L
AUDIO R
VIDEO
C
Y
R/R-Y
G/Y
B/B-Y
TO P6 SIRCS4
TO P6 SIRCS5
TO P5 MATRIX
TO P5 VID/RGB
TO P5 RGB1/RGB2
TO P5 HD_YPBPR
TO P5.10.14 COL
TO P5 232C_MOSI
TO P5 232C_MISO
TO P5 RGB1-H
TO P5 RGB2-H
TO P5.7 A.MUTE
TO P5 POW_INQ
TO P5 DATA_INQ
TO P5 MASTER_RES
IC100 TC74HC4053AF SW
IC1002 TC74HC4053AF SW
IC1003 TC74HC4053AF SW
IC101 M52347 SYNC SEP
IC1014 M62352GP-75ED D/A
IC1000 CXA1211M AMP
IC1001 CXA1211M AMP
IC1005 CXA1211M AMP
IC1004 TC4W53FU SW
IC1044 TC4W53FU SW
IC103 24LC21/SN DOC
IC223 TC7S04FU INV
Q102 2SA1037AK BUFF
Q101 2SC2412K BUFF
Q100 2SC2412K BUFF
Q103 2SC2412K
Q104 2SC2412K
Q1002 2SA1037AK BUFF
Q1001 2SA1037AK BUFF
Q1000 2SA1037AK BUFF
Q1003 2SA1037AK BUFF
Q1006 2SC2412K AMP
Q1009 2SA1037AK AMP
Q1012 2SC2412K BUFF
Q1005 2SC2412K AMP
Q1008 2SA1037AK AMP
Q1011 2SC2412K BUFF
Q1007 2SA1037AK AMP
Q1004 2SC2412K AMP
Q1010 2SC2412K BUFF
Q1013 DTC144EKA SW
Q1014 2SA1037AK BUFF
Q1015 DTC144EKA SW
Q1016 2SA1037AK AMP
Q1017 DTC144EKA SW
Q1018 2SC2412K AMP
Q1019 2SC2412K AMP
Q1020 2SC2412K AMP
Q1021 2SC2412K BUFF
Q1022 2SC2412K BUFF
Q1023 2SC2412K BUFF
Q1024 2SA1037AK BUFF
D100 DAN202K
D1000 MA157-TX
D1001 MA157-TX
D1002 MA157-TX
D1003 MA111
D1004 MA111
D102 UDZ-TE-17-12B
D101 UDZ-TE-17-12B
FB101
TH100
CN17 6P
CN16 6P TO B1 BOARD CN402
CN19 3P RED :ELCO TO B1 BOARD CN401
TO B1 BOARD CN403
RGB1
TO P2
V_POL TO P5
H_POL TO P5
SYS_HS TO P2.P5
CLAMP TO P2
SYS_VS TO P2.P5
DMP_TX
DMP_CLK
DAC2_CS
C.OUT TO P9
Y.OUT TO P9
V.OUT TO P8.9
Y.SW TO P5
SYNC TO P13
CP
TO P10.11.12.13
PICAGC.SW TO P5
YUV/VIDEO TO P5.13
S1 TO P9
SECAM.C TO P9
R-Y1 TO P10
B-Y1 TO P10
Y TO P13
B-Y TO P13
R-Y TO P13
Y_GAIN TO P5
B-Y_GAIN TO P5
R-Y_GAIN TO P5
B (1/14)
(R.G.B INPUT AMP)
B-SS9695UC-B..-P1

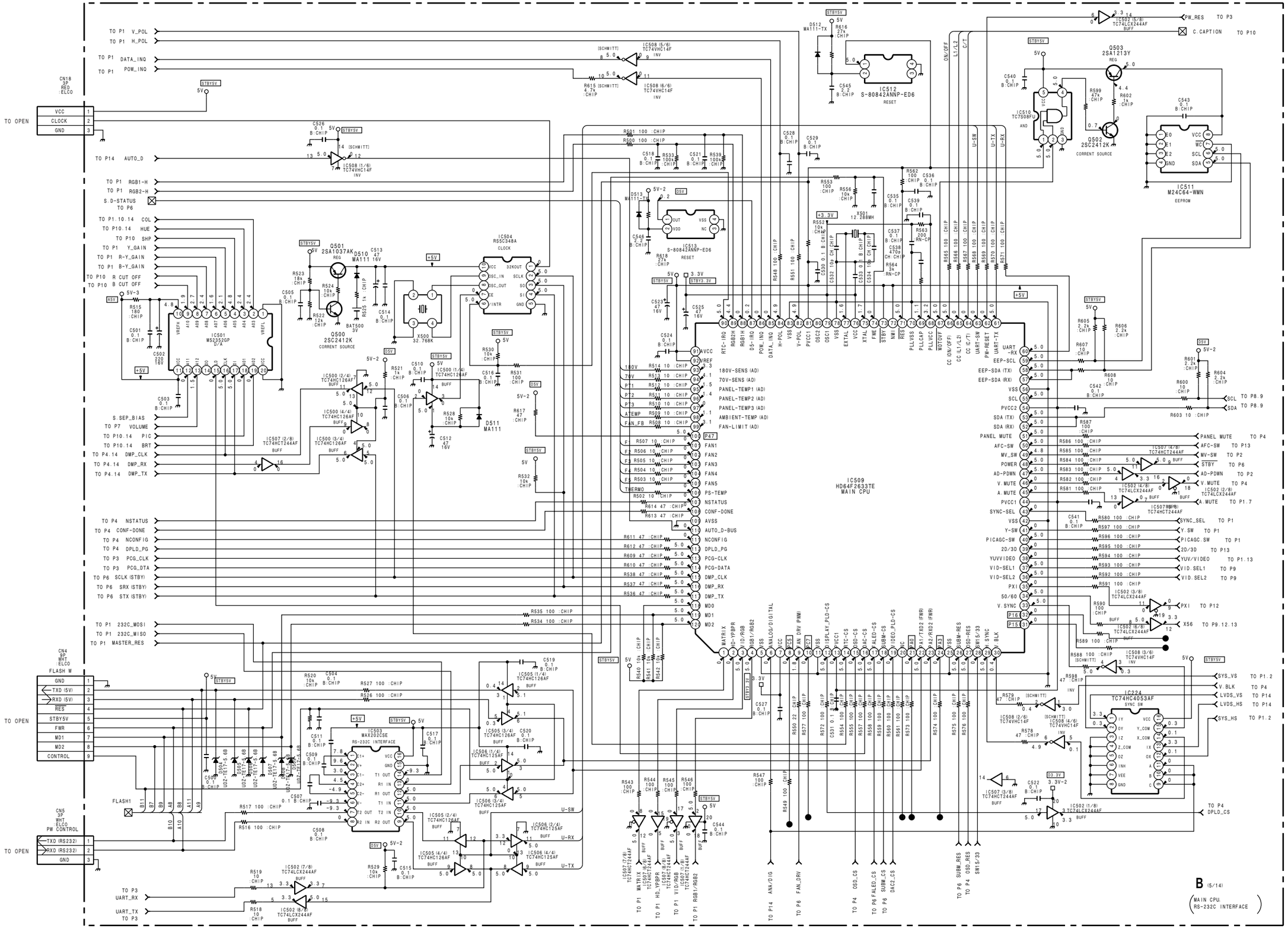

IC200
AD9884
AD CONVERTER
IC207 (1/5)
PW164-20W
SCAN CONVERTER
IC207 (4/5)
PW164-20W
SCAN CONVERTER
IC102
TC74LCX244F
BUFF
IC221 (1/2)
TC7W126FU
BUFF
IC221 (2/2)
TC7W126FU
BUFF
IC220
MC74HC453AF-T1
HALF H KILLER
TO P5 AD-PDWN
TO P1 RGB1
TO P3 PW_SDA
TO P3 PW_SCL
TO P14
VIDEO_BUS
TO P4
VFLD
TO P4
VS_JUD
HS_JUD
MV-SW TO P5
SYS_HS
TO P1, P5
CLAMP TO P1
SYS_VS TO P1, P5
SW15/33
RGB
B (2/14)
(A/D CONV., SCAN CONV.)
B-SS9695UC-B..-P2

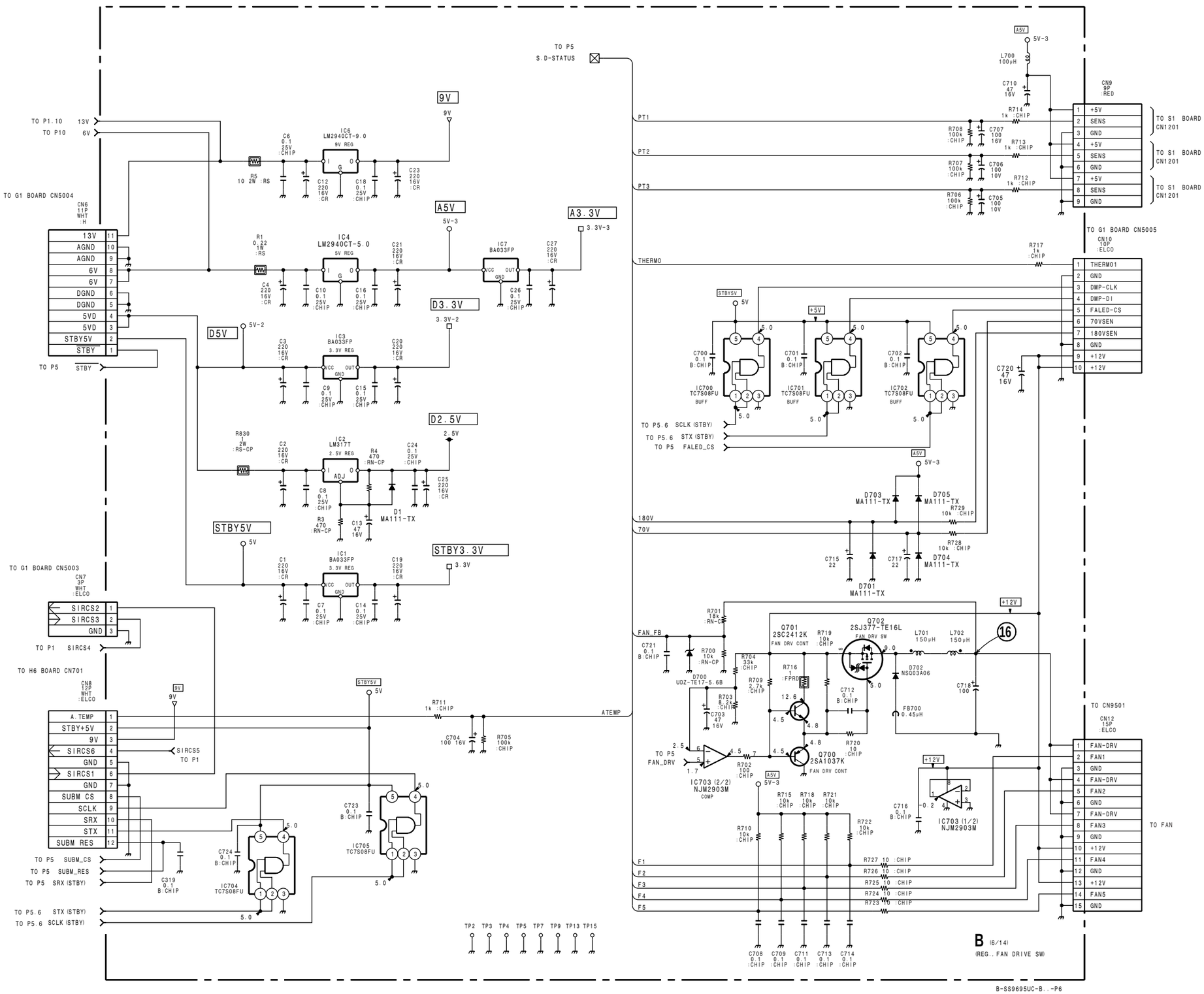

IC204
ICS9161A
CLOCK GEN
X200
14.31818MHz
IC218
ST49C101ACF8-05
CLOCK GEN
IC202 (2/4)
SN74LVC125APW
BUFF
IC202 (3/4)
SN74LVC125APW
BUFF
IC202 (1/4)
SN74LVC125APW
IC202 (4/4)
SN74LVC125APW
IC205
M24C04-MN6T
MEMORY
Q200
2SA1037AK
IC206
MBM29LV400TC-
70PFTN-SV9695
MEMORY
IC207 (2/5)
PW164-20W
SCAN CONVERTER
IC207 (5/5)
PW164-20W
SCAN CONVERTER
JL12
TO P5 PCG_CLK
TO P5 PCG_DTA
TO P5 PW_RES
TO P5 UART_TX
TO P5 UART_RX
TO P2 PW_SDA
TO P2 PW_SCL
B (3/14)
(CLOCK GEN., SCAN CONV.)

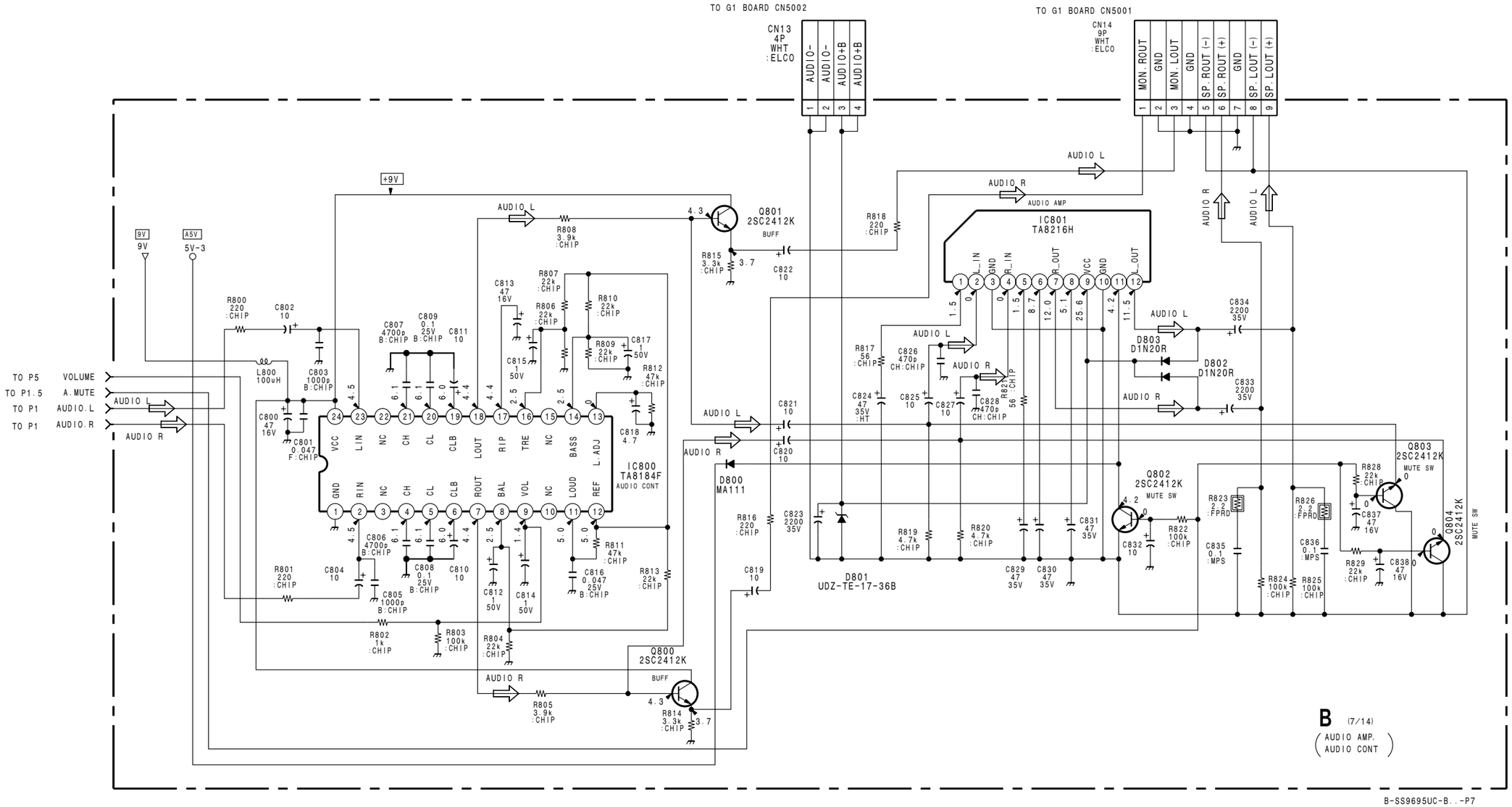


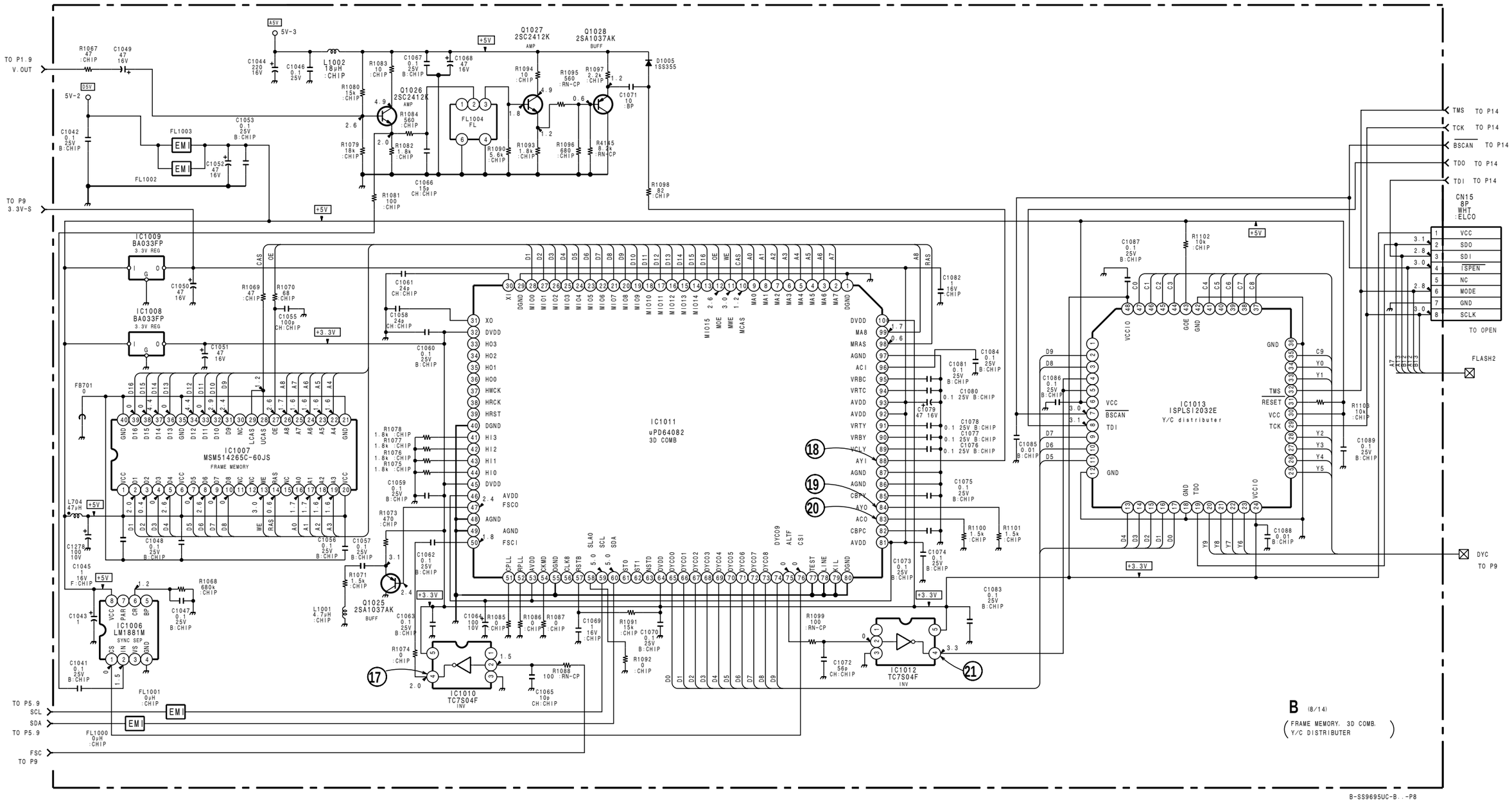
*MARK:

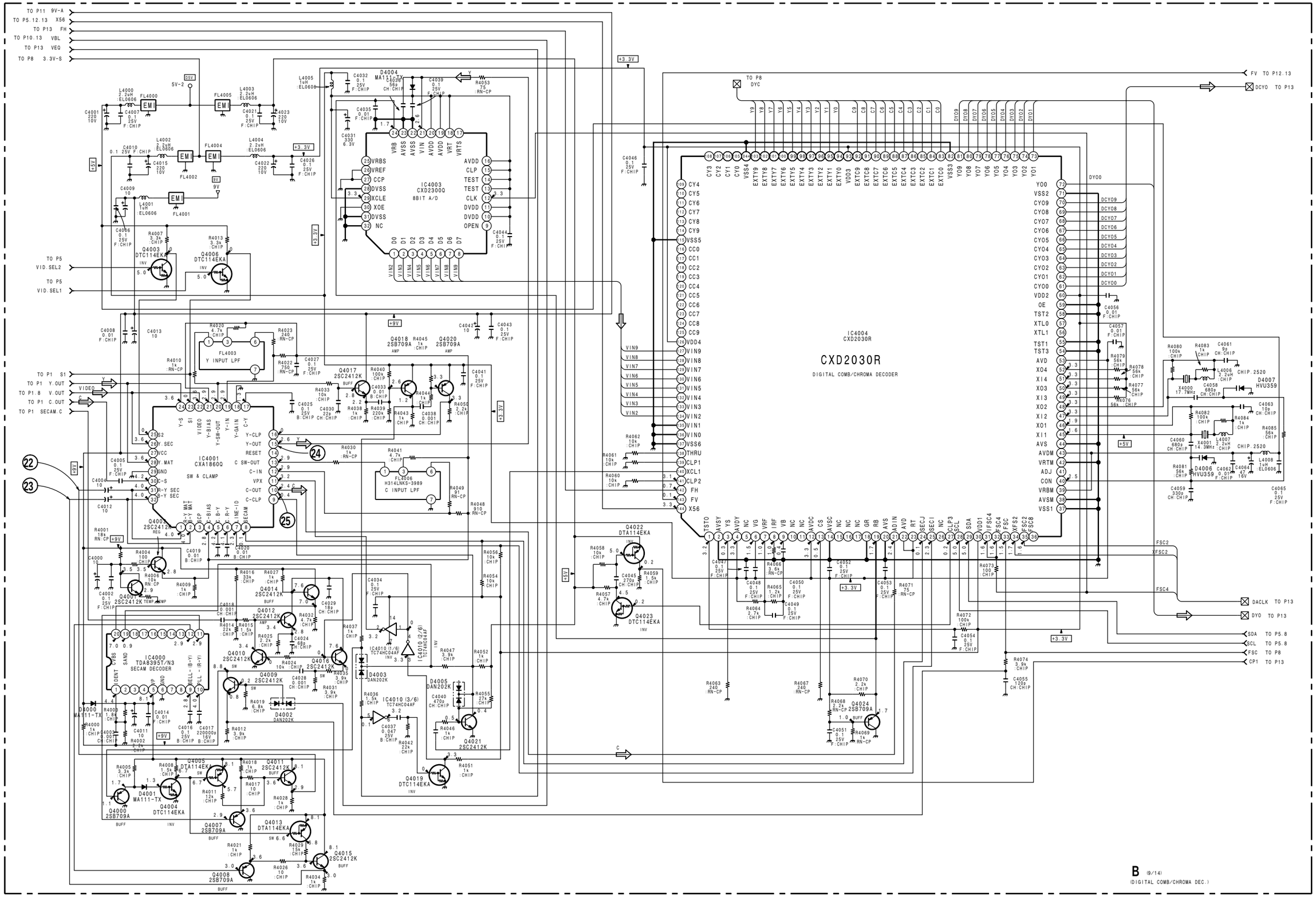
	PFM-500	PFM-510
R269. R270. R271. R272. R274. R275. R276. R278. R281	No mount	0
R273. R279. R280	0	No mount
R230	No mount	5.6k

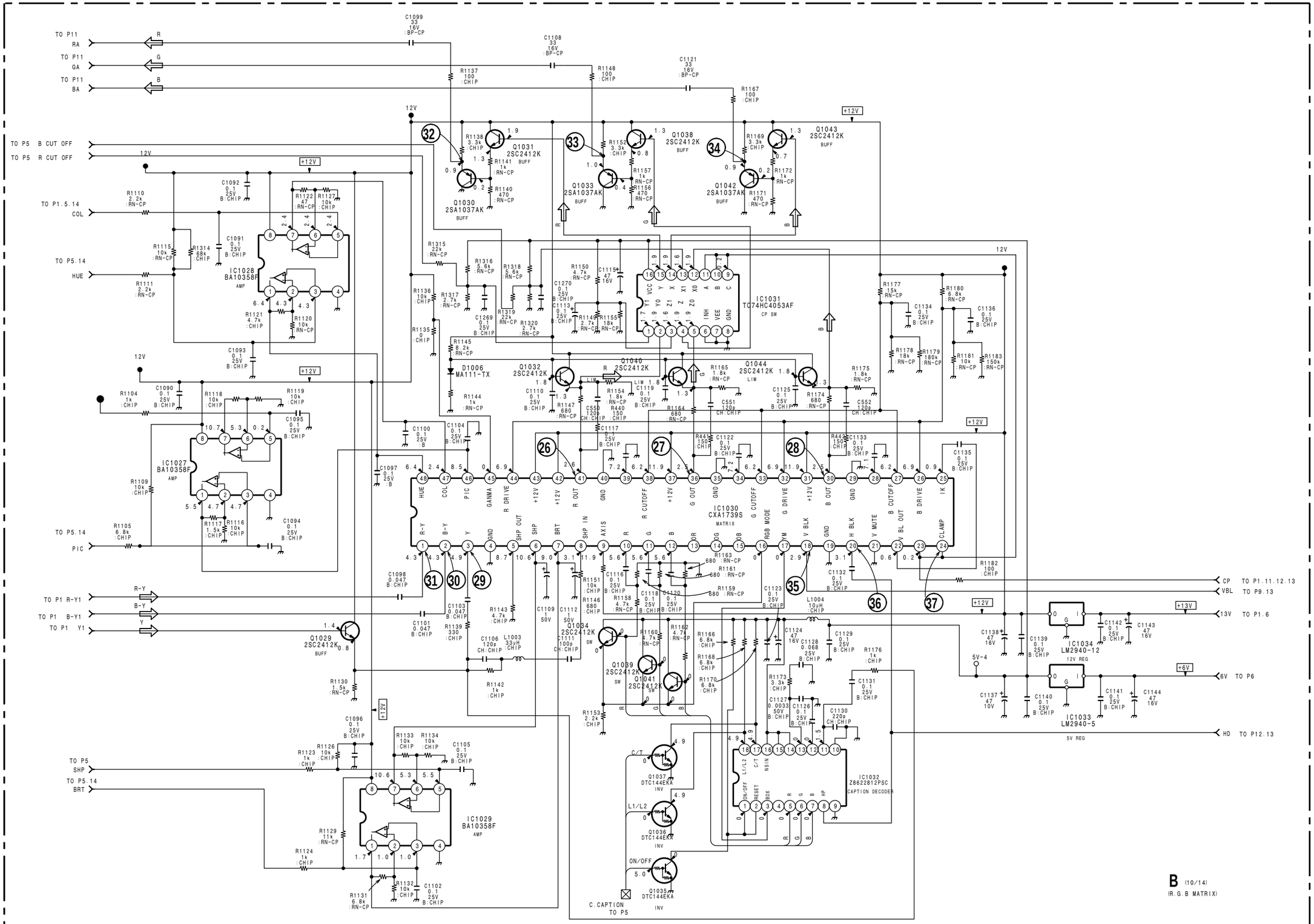

IC509
HD64F2633TE
MAIN CPU
IC512
S-80842ANNP-ED6
RESET
IC513
S-80842ANNP-ED6
RESET
IC511
M24C64-WMN
EEPROM
IC224
TC74HC4053AF
SYNC SW
IC501
MS2352GP
D/A
IC503
MAX202CSE
RS-232C INTERFACE
IC504
RSC5348A
CLOCK
Q500
2SC2412K
CORRENT SOURCE
Q501
2SA1037AK
REG
Q502
2SC2412K
CORRENT SOURCE
Q503
2SA1213Y
REG
D510
MA111
D511
MA111
D512
MA111-TX
D513
MA111-TX
X500
32.768K
X501
12.288MH
CN18
3P
RED
:ELCO
CN4
6P
WHT
:ELCO
FLASH W
CN5
3P
WHT
:ELCO
PW CONTROL
FLASH1
TO OPEN
TO P1 V_POL
TO P1 H_POL
TO P1 DATA_INQ
TO P1 POW_INQ
TO P14 AUTO_D
TO P1 RGB1-H
TO P1 RGB2-H
S.D-STATUS
TO P6
TO P1.10.14 COL
TO P10.14 HUE
TO P10 SHP
TO P1 Y_GAIN
TO P1 R-Y_GAIN
TO P1 B-Y_GAIN
TO P10 R CUT OFF
TO P10 B CUT OFF
S.SEP_BIAS
TO P7 VOLUME
TO P10.14 PIC
TO P10.14 BRT
TO P4.14 DMP_CLK
TO P4.14 DMP_RX
TO P4.14 DMP_TX
TO P4 NSTATUS
TO P4 CONF-DONE
TO P4 NCONFIG
TO P4 DPLD_PG
TO P3 PCG_CLK
TO P3 PCG_DTA
TO P6 SCLK (STBY)
TO P6 SRX (STBY)
TO P6 STX (STBY)
TO P1 232C_MOSI
TO P1 232C_MISO
TO P1 MASTER_RES
TO P3 UART_RX
UART_TX
TO P3
PW_RES
TO P3
C.CAPTION
TO P10
TO P4 PANEL MUTE
TO P13 AFC-SW
TO P2 MV-SW
TO P6 STBY
TO P2 AD-PDWN
TO P4 V.MUTE
TO P1.7 A.MUTE
TO P1 SYNC_SEL
TO P1 Y.SW
TO P1 PICAGC.SW
TO P13 2D/3D
TO P1.13 YUV/VIDEO
TO P9 VID.SEL1
TO P9 VID.SEL2
TO P12 PXI
TO P9.12.13 X56
TO P1.2 SYS_VS
TO P4 V.BLK
TO P14 LVDS_VS
TO P14 LVDS_HS
TO P1.2 SYS_HS
TO P4 DPLD_CS
TO P8.9 SCL
TO P8.9 SDA
B (5/14)
MAIN CPU
RS-232C INTERFACE
180V-SENS (AD)
70V-SENS (AD)
PANEL-TEMP1 (AD)
PANEL-TEMP2 (AD)
PANEL-TEMP3 (AD)
AMBIENT-TEMP (AD)
FAN-LIMIT (AD)
FAN1
FAN2
FAN3
FAN4
FAN5
PS-TEMP
NSTATUS
CONF-DONE
AVSS
AUTO_D-BUS
NCONFIG
DPLD_PG
PCG-CLK
PCG-DATA
DMP_CLK
DMP_RX
DMP_TX
MD0
MD1
MD2
U-SW
U-TX
U-RX
STBY5V
+5V
+3.3V
5V-2
3.3V
D3.3V
B-SS9695UC-B..-P5


TO P5
S.D-STATUS
TO P1.10 13V
TO P10 6V
9V
IC6 LM2940CT-9.0 9V REG
R5 10 2W :RS
C6 0.1 25V :CHIP
C12 220 16V :CR
C18 0.1 25V :CHIP
C23 220 16V :CR
TO G1 BOARD CN5004
CN6 11P WHT :H
13V 11
AGND 10
AGND 9
6V 8
6V 7
DGND 6
DGND 5
5VD 4
5VD 3
STBY5V 2
STBY 1
TO P5 STBY
A5V
5V-3
A3.3V
3.3V-3
R1 0.22 1W :RS
C4 220 16V :CR
IC4 LM2940CT-5.0 5V REG
C10 0.1 25V :CHIP
C16 0.1 25V :CHIP
C21 220 16V :CR
IC7 BA033FP
C26 0.1 25V :CHIP
C27 220 16V :CR
D3.3V
3.3V-2
D5V
5V-2
IC3 BA033FP 3.3V REG
C3 220 16V :CR
C9 0.1 25V :CHIP
C15 0.1 25V :CHIP
C20 220 16V :CR
D2.5V
2.5V
R830 2W :RS-CP
C2 220 16V :CR
IC2 LM317T 2.5V REG
R4 470 :RN-CP
C24 0.1 25V :CHIP
C25 220 16V :CR
C8 0.1 25V :CHIP
R3 470 :RN-CP
C13 47 16V
D1 MA111-TX
STBY5V
5V
STBY3.3V
3.3V
IC1 BA033FP 3.3V REG
C1 220 16V :CR
C7 0.1 25V :CHIP
C14 0.1 25V :CHIP
C19 220 16V :CR
TO G1 BOARD CN5003
CN7 3P WHT :ELCO
SIRCS2 1
SIRCS3 2
GND 3
TO P1 SIRCS4
TO H6 BOARD CN701
CN8 12P WHT :ELCO
A.TEMP 1
STBY+5V 2
9V 3
SIRCS6 4
GND 5
SIRCS1 6
GND 7
SUBM CS 8
SCLK 9
SRX 10
STX 11
SUBM RES 12
SIRCS5
TO P1
R711 1k :CHIP
C704 100 16V
R705 100k :CHIP
ATEMP
C723 0.1 B:CHIP
IC705 TC7S08FU
C724 0.1 B:CHIP
IC704 TC7S08FU
C319 0.1 B:CHIP
TO P5 SUBM_CS
TO P5 SUBM_RES
TO P5 SRX (STBY)
TO P5.6 STX (STBY)
TO P5.6 SCLK (STBY)
TP2 TP3 TP4 TP5 TP7 TP9 TP13 TP15
PT1
PT2
PT3
THERMO
L700 100µH
C710 47 16V
CN9 9P :RED
R714 1k :CHIP
R713 1k :CHIP
R712 1k :CHIP
R708 100k :CHIP
R707 100k :CHIP
R706 100k :CHIP
C707 100 16V
C706 100 10V
C705 100 10V
1 +5V
2 SENS
3 GND
4 +5V
5 SENS
6 GND
7 +5V
8 SENS
9 GND
TO S1 BOARD CN1201
TO S1 BOARD CN1201
TO S1 BOARD CN1201
TO G1 BOARD CN5005
CN10 10P :ELCO
R717 1k :CHIP
1 THERM01
2 GND
3 DMP-CLK
4 DMP-DI
5 FALED-CS
6 70VSEN
7 180VSEN
8 GND
9 +12V
10 +12V
STBY5V
5V
+5V
C700 0.1 B:CHIP
C701 0.1 B:CHIP
C702 0.1 B:CHIP
IC700 TC7S08FU BUFF
IC701 TC7S08FU BUFF
IC702 TC7S08FU BUFF
C720 47 16V
TO P5.6 SCLK (STBY)
TO P5.6 STX (STBY)
TO P5 FALED_CS
D703 MA111-TX
D705 MA111-TX
R729 10k :CHIP
R728 10k :CHIP
D704 MA111-TX
180V
70V
C715 22
C717 22
D701 MA111-TX
+12V
FAN_FB
Q701 2SC2412K FAN DRV CONT
R719 10k :CHIP
Q702 2SJ377-TE16L FAN DRV SW
L701 150µH
L702 150µH
16
C721 0.1 B:CHIP
R700 10k :RN-CP
D700 UDZ-TE17-5.6B
R704 33k :CHIP
R716 1 :FPRD
R709 2.7k :CHIP
D702 NSQ03A06
C718 100
C712 0.1 B:CHIP
R703 8.31k :CHIP
C703 47 16V
FB700 0.45µH
R720 10 :CHIP
Q700 2SA1037K FAN DRV CONT
TO P5 FAN_DRV
IC703 (2/2) NJM2903M COMP
R702 100 :CHIP
R715 10k :CHIP
R718 10k :CHIP
R721 10k :CHIP
R710 10k :CHIP
R722 10k :CHIP
C716 0.1 B:CHIP
IC703 (1/2) NJM2903M
TO CN9501
CN12 15P :ELCO
1 FAN-DRV
2 FAN1
3 GND
4 FAN-DRV
5 FAN2
6 GND
7 FAN-DRV
8 FAN3
9 GND
10 +12V
11 FAN4
12 GND
13 +12V
14 FAN5
15 GND
TO FAN
F1
F2
F3
F4
F5
R727 10 :CHIP
R726 10 :CHIP
R725 10 :CHIP
R724 10 :CHIP
R723 10 :CHIP
C708 0.1 :CHIP
C709 0.1 :CHIP
C711 0.1 :CHIP
C713 0.1 :CHIP
C714 0.1 :CHIP
B (6/14)
(REG., FAN DRIVE SW)
B-SS9695UC-B...-P6

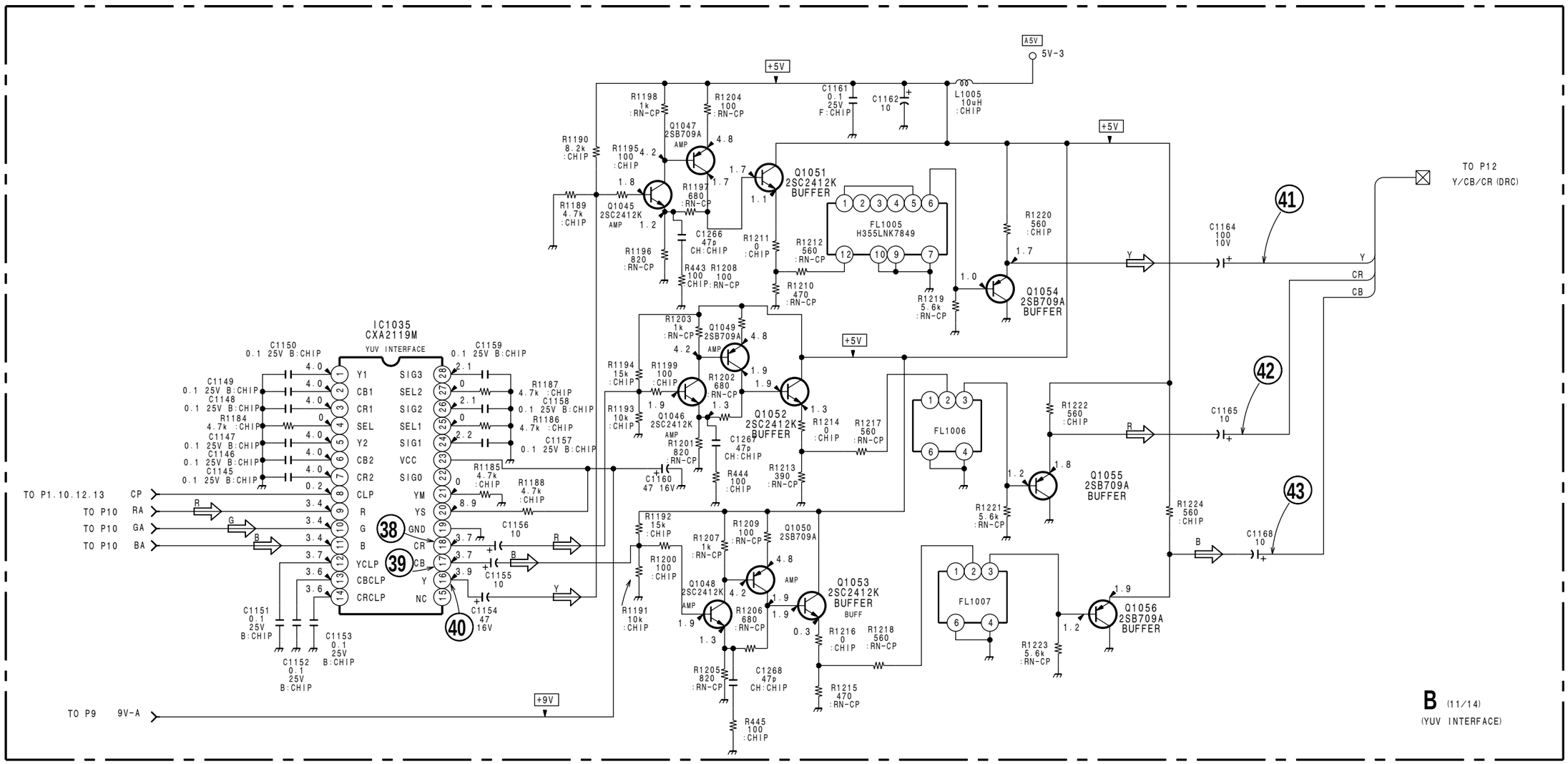

TO G1 BOARD CN5002
CN13
4P
WHT
:ELCO
AUDIO-
AUDIO-
AUDIO+B
AUDIO+B
TO G1 BOARD CN5001
CN14
9P
WHT
:ELCO
MON. ROUT
GND
MON. LOUT
GND
SP. ROUT (-)
SP. ROUT (+)
GND
SP. LOUT (-)
SP. LOUT (+)
+9V
9V
A5V
5V-3
TO P5 VOLUME
TO P1.5 A.MUTE
TO P1 AUDIO.L
TO P1 AUDIO.R
AUDIO L
AUDIO R
AUDIO AMP
IC801
TA8216H
L_IN
GND
R_IN
R_OUT
VCC
GND
L_OUT
IC800
TA8184F
AUDIO CONT
VCC
LIN
NC
CH
CL
CLB
LOUT
RIP
TRE
NC
BASS
L.ADJ
GND
RIN
NC
CH
CL
CLB
ROUT
BAL
VOL
NC
LOUD
REF
Q801
2SC2412K
BUFF
Q800
2SC2412K
BUFF
Q802
2SC2412K
MUTE SW
Q803
2SC2412K
MUTE SW
Q804
2SC2412K
MUTE SW
D800
MA111
D801
UDZ-TE-17-36B
D803
D1N20R
D802
D1N20R
R800 220 :CHIP
R801 220 :CHIP
R802 1k :CHIP
R803 100k :CHIP
R804 22k :CHIP
R805 3.9k :CHIP
R806 22k :CHIP
R807 22k :CHIP
R808 3.9k :CHIP
R809 22k :CHIP
R810 22k :CHIP
R811 47k :CHIP
R812 47k :CHIP
R813 22k :CHIP
R814 3.3k :CHIP
R815 3.3k :CHIP
R816 220 :CHIP
R817 56 :CHIP
R818 220 :CHIP
R819 4.7k :CHIP
R820 4.7k :CHIP
R822 100k :CHIP
R823 2.2 :FPRD
R824 100k :CHIP
R825 100k :CHIP
R826 2.2 :FPRD
R828 22k :CHIP
R829 22k :CHIP
C800 47 16V
C801 0.047 F:CHIP
C802 10
C803 1000p B:CHIP
C804 10
C805 1000p B:CHIP
C806 4700p B:CHIP
C807 4700p B:CHIP
C808 0.1 25V B:CHIP
C809 0.1 25V B:CHIP
C810 10
C811 10
C812 1 50V
C813 47 16V
C814 1 50V
C815 1 50V
C816 0.047 25V B:CHIP
C817 1 50V
C818 4.7
C820 10
C821 10
C822 10
C824 47 35V :HT
C825 10
C826 470p CH:CHIP
C827 10
C828 470p CH:CHIP
C829 47 35V
C830 47 35V
C831 47 35V
C832 10
C833 2200 35V
C834 2200 35V
C835 0.1 :MPS
C836 0.1 :MPS
C837 47 16V
C838 47 16V
L800 100uH
B (7/14)
(AUDIO AMP. AUDIO CONT)
B-SS9695UC-B. .-P7

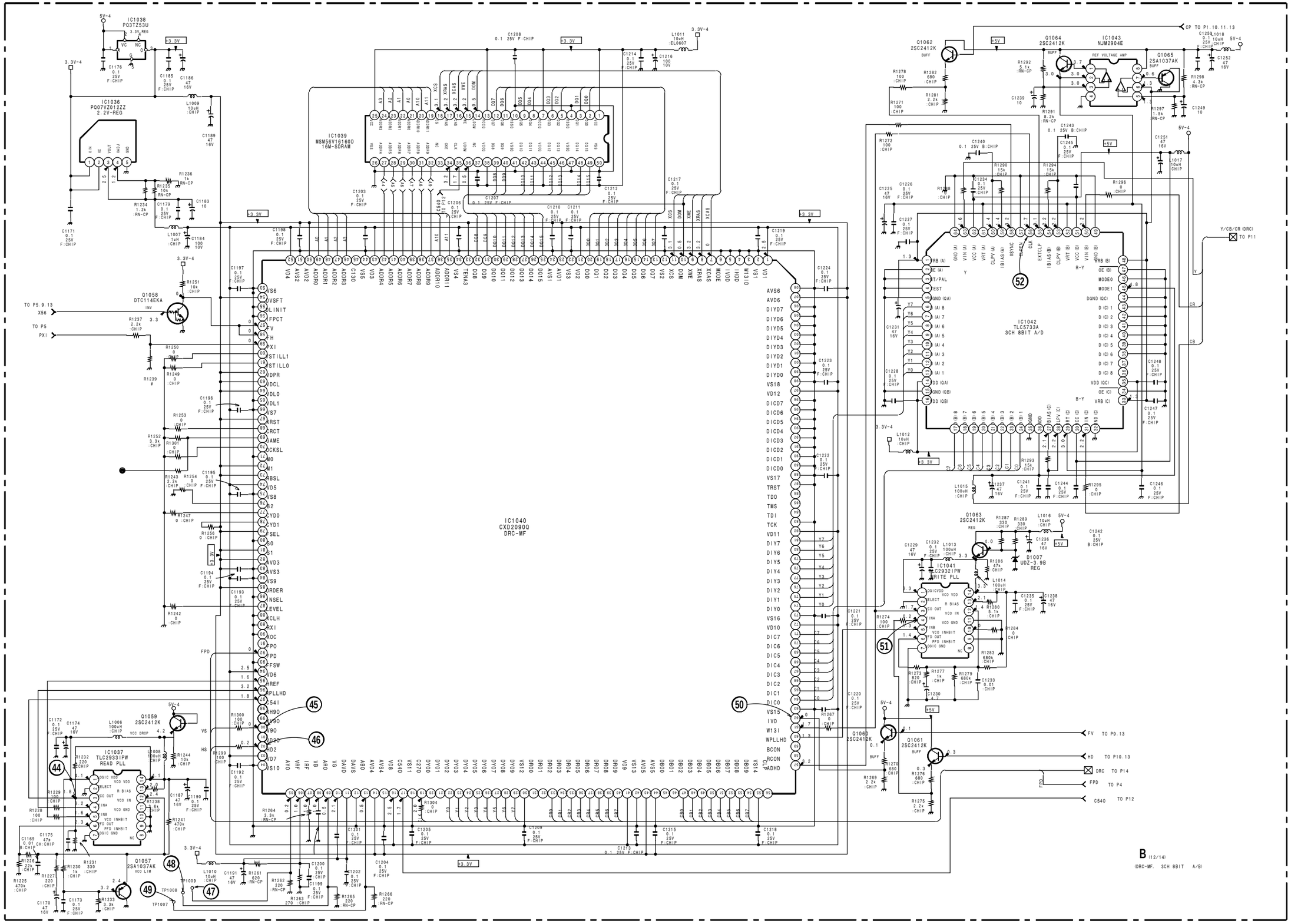

IC1009 BA033FP 3.3V REG
IC1008 BA033FP 3.3V REG
IC1007 MSM514265C-60JS FRAME MEMORY
IC1011 uPD64082 3D COMB
IC1006 LM1881M SYNC SEP
IC1010 TC7S04F INV
IC1012 TC7S04F INV
IC1013 ispLSI2032E Y/C distributer
Q1025 2SA1037AK BUFF
Q1026 2SC2412K AMP
Q1027 2SC2412K AMP
Q1028 2SA1037AK BUFF
FL1001
FL1002
FL1003
FL1004 FL
L1001 4.7μH :CHIP
L1002 18μH :CHIP
D1005 1SS355
CN15 8P WHT :ELCO
TO P1.9 V.OUT
TO P9 3.3V-S
TO P5.9 SCL
TO P5.9 SDA
FSC TO P9
TMS TO P14
TCK TO P14
BSCAN TO P14
TDO TO P14
TDI TO P14
TO OPEN
FLASH2
DYC TO P9
B (8/14)
(FRAME MEMORY. 3D COMB. Y/C DISTRIBUTER)
B-SS9695UC-B..-P8

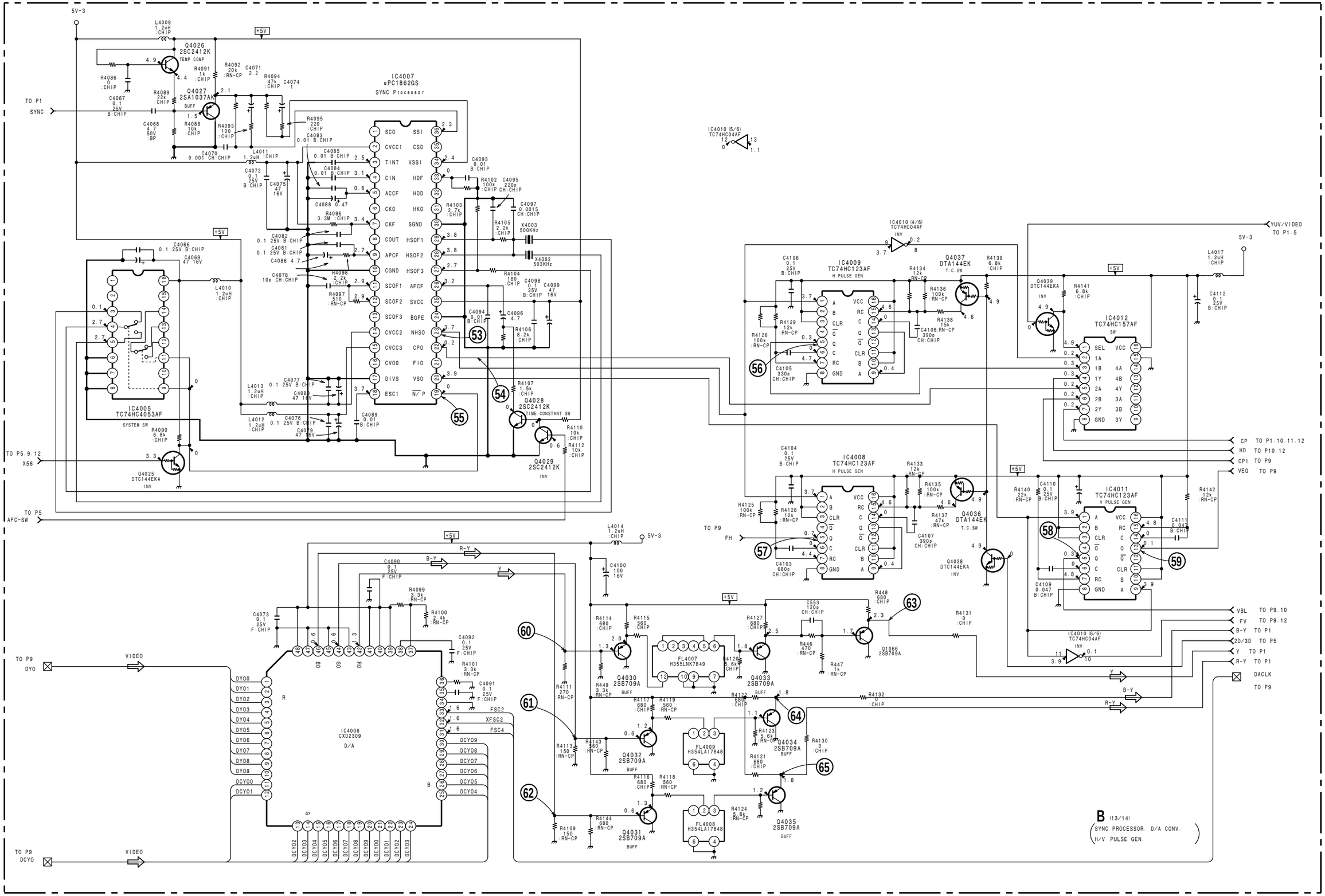

IC4004
CXD2030R
DIGITAL COMB/CHROMA DECODER
IC4003
CXD2300Q
8BIT A/D
IC4000
TDA8395T/N3
SECAM DECODER
IC4001
CXA1860Q
SW & CLAMP
B (9/14)
(DIGITAL COMB/CHROMA DEC.)

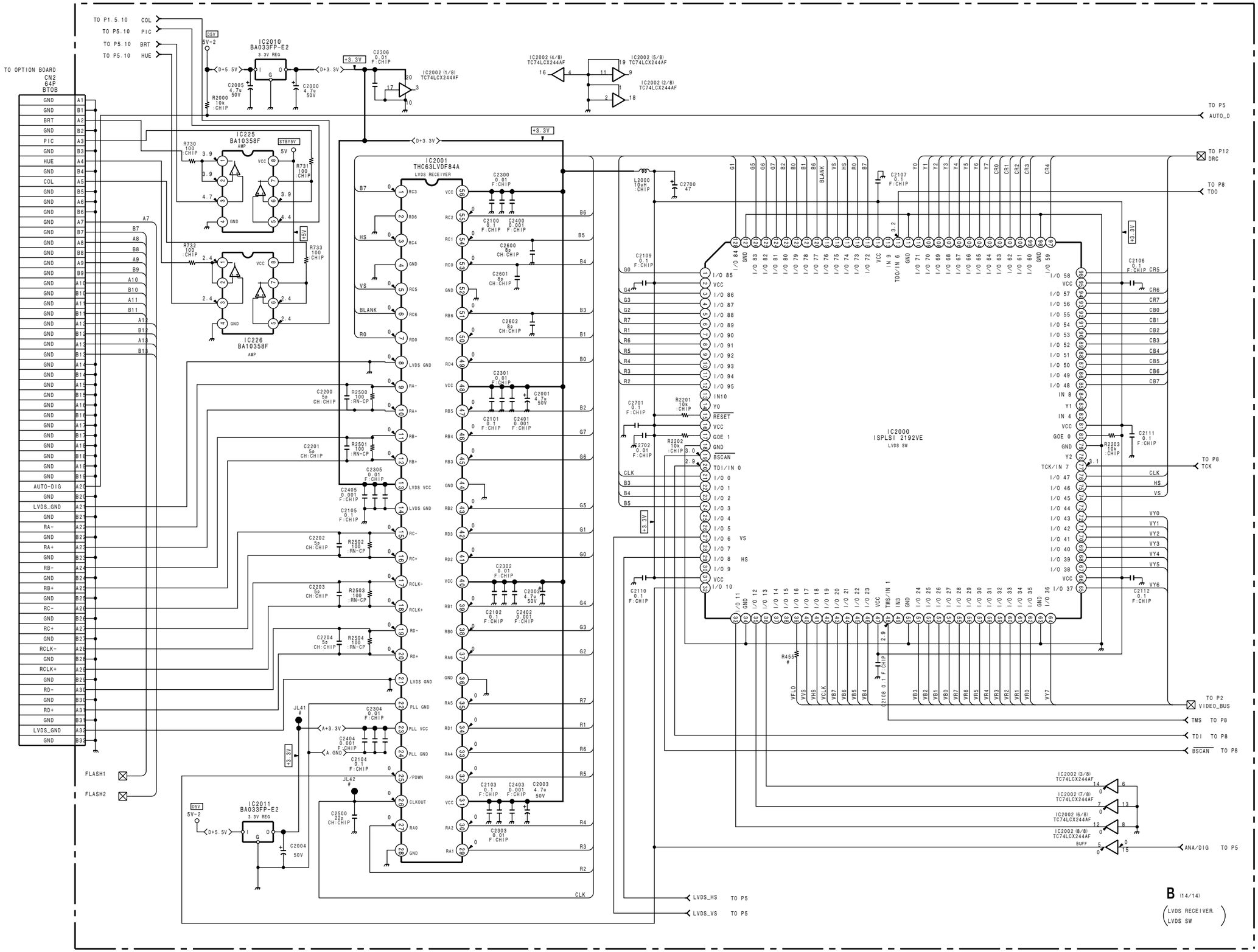


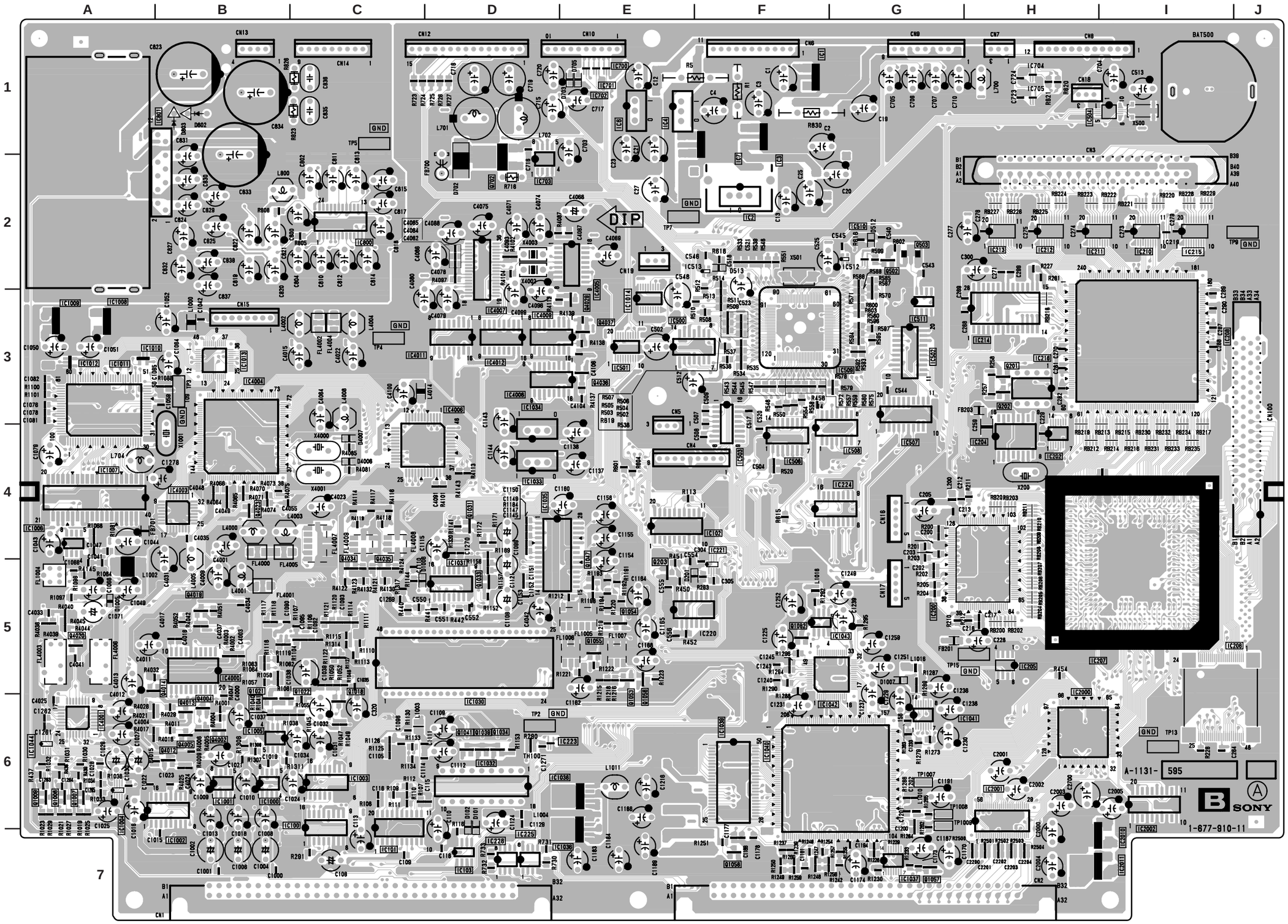
B-SS9695UC-B.-P10


IC1035
CXA2119M
YUV INTERFACE
Y1
CB1
CR1
SEL
Y2
CB2
CR2
CLP
R
G
B
YCLP
CBCLP
CRCLP
SIG3
SEL2
SEL1
SIG2
SIG1
VCC
SIG0
YM
YS
GND
CR
CB
Y
NC
TO P1.10.12.13 CP
TO P10 RA
TO P10 GA
TO P10 BA
TO P9 9V-A
+5V
A5V
5V-3
+9V
Q1047 2SB709A AMP
Q1045 2SC2412K AMP
Q1049 2SB709A AMP
Q1046 2SC2412K AMP
Q1048 2SC2412K AMP
Q1051 2SC2412K BUFFER
Q1052 2SC2412K BUFFER
Q1053 2SC2412K BUFFER
Q1050 2SB709A BUFF
Q1054 2SB709A BUFFER
Q1055 2SB709A BUFFER
Q1056 2SB709A BUFFER
FL1005 H355LNK7849
FL1006
FL1007
TO P12
Y/CB/CR (DRC)
B (11/14)
(YUV INTERFACE)
B-SS9695UC-B..-P11

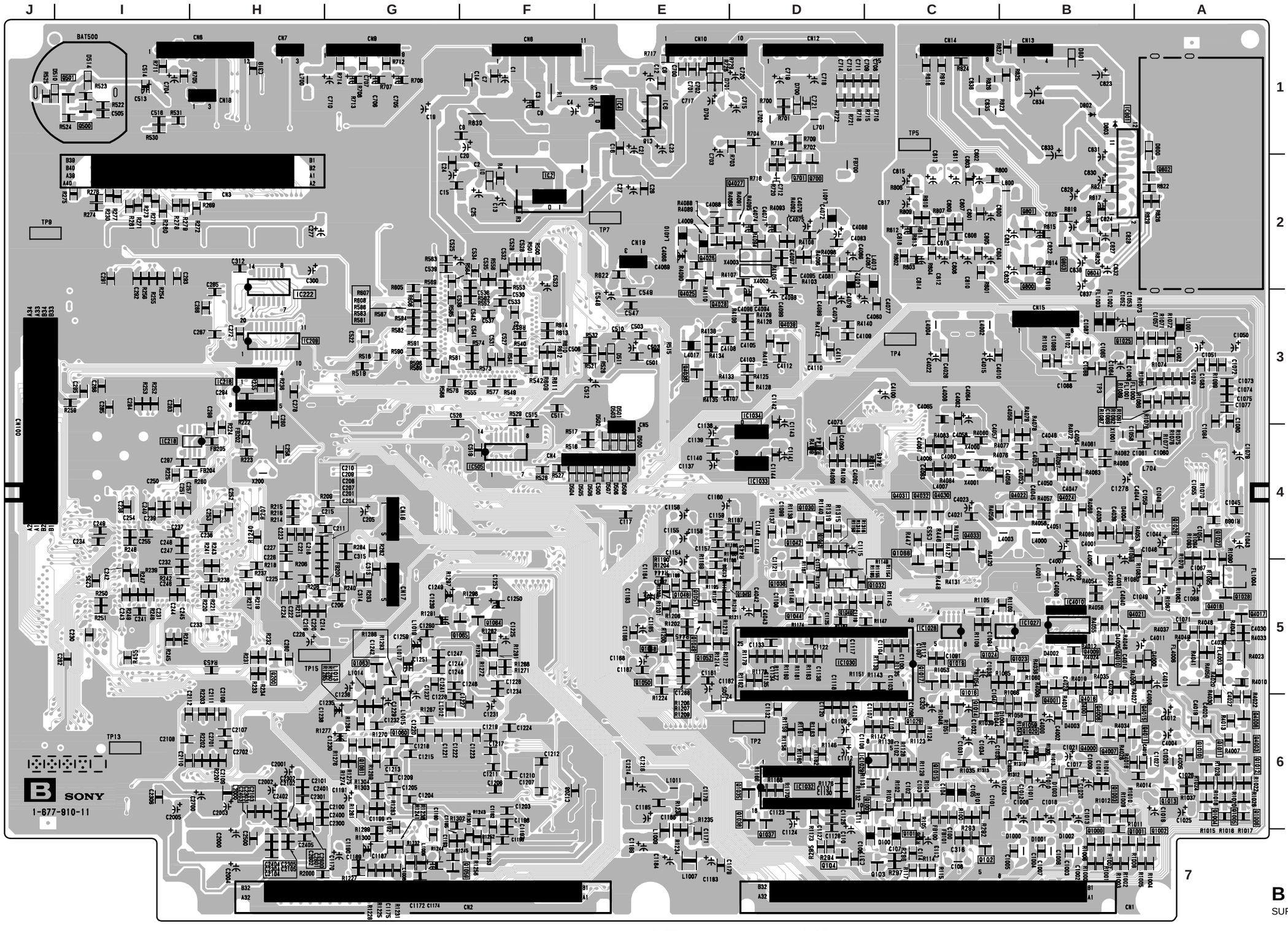

IC1038
POST25XU
3.3V REG
IC1036
PQ07VZ012ZZ
2.2V-REG
IC1039
MSM56V16160D
16M-SDRAM
IC1040
CXD2090Q
DRC-MF
IC1042
TLC5733A
3CH 8BIT A/D
IC1037
TLC2933IPW
READ PLL
IC1041
LC2932IPW
BITE PLL
Q1062
2SC2412K
Q1064
2SC2412K
IC1043
NJM2904E
Q1065
2SA1037AK
Q1063
2SC2412K
D1007
UDZ-3.9B
REG
Q1058
DTC114EKA
Q1059
2SC2412K
Q1060
2SC2412K
Q1061
2SC2412K
Q1057
2SA1037AK
+3.3V
+5V
5V-4
3.3V-4
TO P5.9.13
X56
TO P5
PXI
FPD
TO P11
TO P9.13
TO P10.13
TO P14
TO P4
TO P12
C540
B (12/14)
(DRC-MF, 3CH 8BIT A/D)
B-SS9695UC-B...-P12


IC4007 uPC1862GS SYNC Processor
IC4005 TC74HC4053AF SYSTEM SW
IC4009 TC74HC123AF H PULSE GEN
IC4008 TC74HC123AF H PULSE GEN
IC4012 TC74HC157AF SW
IC4011 TC74HC123AF V PULSE GEN
IC4006 CXD2309 D/A
Q4026 2SC2412K TEMP COMP
Q4027 2SA1037AK BUFF
Q4025 DTC144EKA INV
Q4028 2SC2412K TIME CONSTANT SW
Q4029 2SC2412K INV
Q4037 DTA144EK T.C.SW
Q4036 DTA144EK T.C.SW
Q4039 DTC144EKA INV
Q4038 DTC144EKA INV
Q4030 2SB709A BUFF
Q4033 2SB709A BUFF
Q4032 2SB709A BUFF
Q4034 2SB709A BUFF
Q4031 2SB709A BUFF
Q4035 2SB709A BUFF
Q1066 2SB709A
FL4007 H355LNK7849
FL4009 H354LA17848
FL4008 H354LA17848
X4003 500KHz
X4002 503KHz
TO P1 SYNC
TO P5.9.12 X56
TO P5 AFC-SW
TO P9 FH
TO P9 DYO
TO P9 DCYO
VIDEO
YUV/VIDEO TO P1.5
CP TO P1.10.11.12
HD TO P10.12
CP1 TO P9
VEQ TO P9
VBL TO P9.10
FV TO P9.12
B-Y TO P1
2D/3D TO P5
Y TO P1
R-Y TO P1
DACLK TO P9
B (13/14) SYNC PROCESSOR. D/A CONV. H/V PULSE GEN.


TO OPTION BOARD
CN2
64P
BTOB
TO P1.5.10 COL
TO P5.10 PIC
TO P5.10 BRT
TO P5.10 HUE
IC2010
BA033FP-E2
3.3V REG
IC2002 (1/8) TC74LCX244AF
IC2002 (2/8) TC74LCX244AF
IC2002 (3/8) TC74LCX244AF
IC2002 (4/8) TC74LCX244AF
IC2002 (5/8) TC74LCX244AF
IC2002 (6/8) TC74LCX244AF
IC2002 (7/8) TC74LCX244AF
IC2002 (8/8) TC74LCX244AF
IC225
BA10358F
AMP
IC226
BA10358F
AMP
IC2001
THC63LVDF84A
LVDS RECEIVER
IC2000
ispLSI 2192VE
LVDS SW
IC2011
BA033FP-E2
3.3V REG
TO P5 AUTO_D
TO P12 DRC
TO P8 TDO
TO P8 TCK
TO P2 VIDEO_BUS
TMS TO P8
TDI TO P8
BSCAN TO P8
ANA/DIG TO P5
LVDS_HS TO P5
LVDS_VS TO P5
FLASH1
FLASH2
CLK
B (14/14)
(LVDS RECEIVER, LVDS SW)
B-SS9695UC-B. .-P14



B -A SIDE-
SUFFIX: -11



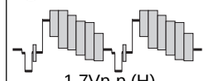
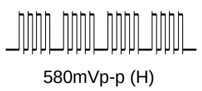
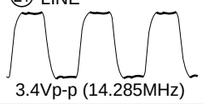
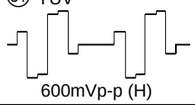
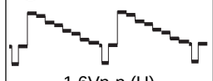
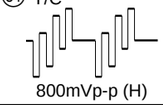
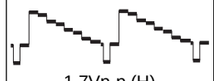
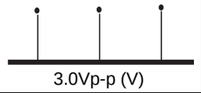
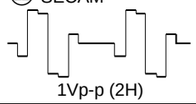
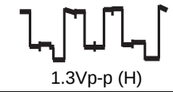
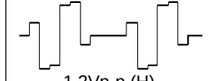
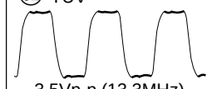
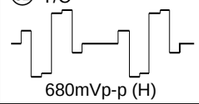
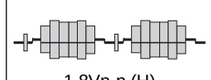
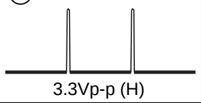
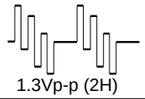
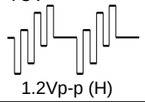
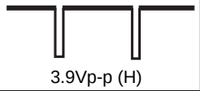
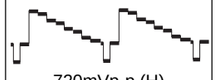
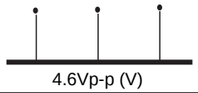
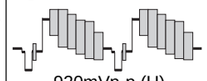
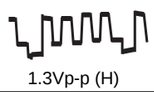
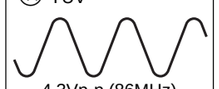
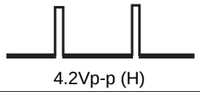
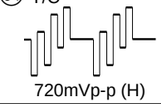
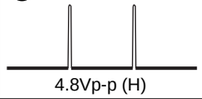
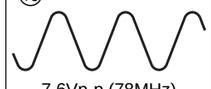
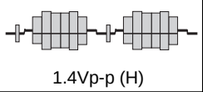
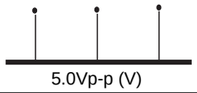
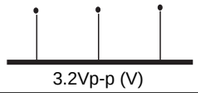
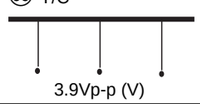
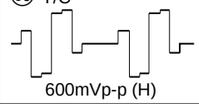
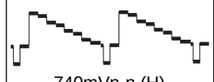
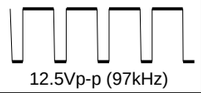
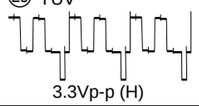
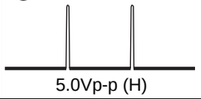
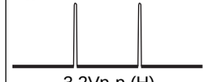
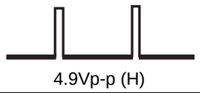
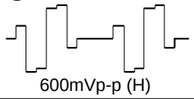
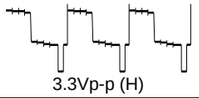
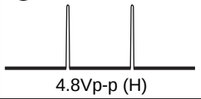
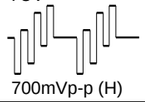
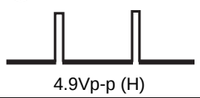
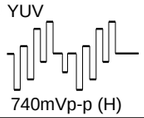
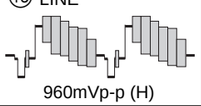
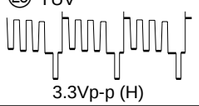
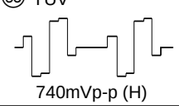
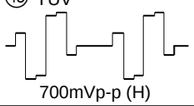
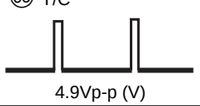
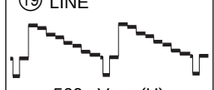
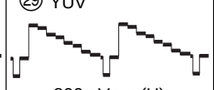
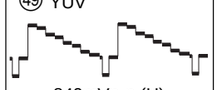
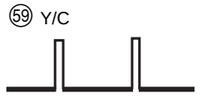
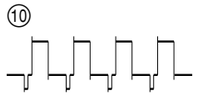
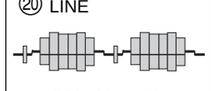
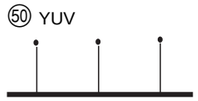
B -B SIDE-
SUFFIX: -11

B BOARD

*: B SIDE

IC1	F-1	IC1044	A-6	Q1057	G-7	D4002	*B-5
IC2	F-2	IC4000	B-5	Q1058	F-7	D4003	*B-6
IC3	F-1	IC4001	A-6	Q1059	*F-7	D4004	*B-4
IC4	E-1	IC4003	B-4	Q1060	*G-6	D4005	*B-5
IC6	E-1	IC4004	B-3	Q1061	*G-6	D4006	C-4
IC7	F-1	IC4005	E-2	Q1063	*G-5	D4007	C-4
IC100	C-6	IC4006	D-3	Q1064	*F-5		
IC102	E-4	IC4007	D-3	Q1066	*C-5	TP2	D-6
IC101	C-6	IC4008	D-3	Q1082	F-5	TP3	B-3
IC103	D-7	IC4009	D-3	Q1085	*G-5	TP4	C-3
IC200	H-4	IC4010	*B-5	Q4000	*B-6	TP5	C-1
IC202	H-3	IC4011	D-3	Q4001	*B-5	TP7	E-2
IC204	H-3	IC4012	D-3	Q4002	B-6	TP9	J-2
IC205	H-5			Q4003	*A-6	TP13	I-6
IC206	I-5	Q100	*C-6	Q4004	B-6	TP15	H-5
IC207	I-4	Q101	*C-7	Q4006	*A-6	TP1007	G-6
IC208	H-3	Q102	*C-7	Q4007	*B-6	TP1008	G-6
IC209	*H-3	Q103	*C-7	Q4008	*B-6	TP1009	G-6
IC210	I-2	Q104	*D-7	Q4009	*B-5		
IC211	H-2	Q200	*H-5	Q4005	B-6		
IC212	H-2	Q201	H-3	Q4010	*B-5		
IC213	H-2	Q202	H-3	Q4012	B-6		
IC214	H-3	Q203	E-5	Q4011	*A-6		
IC215	I-2	Q500	*I-1				
IC216	H-3	Q501	*I-1	Q4013	B-6		
IC218	*H-4	Q502	G-2	Q4014	B-5		
IC219	I-2	Q503	G-2	Q4015	*A-6		
IC220	E-5	Q700	*D-2	Q4016	*B-5		
IC221	F-4	Q701	*D-2	Q4017	*A-5		
IC222	*H-2	Q702	D-2	Q4018	*A-5		
IC223	D-6	Q800	*B-2	Q4019	B-5		
IC224	F-4	Q801	*B-2	Q4020	A-5		
IC225	D-7	Q802	*A-2	Q4021	*B-5		
IC226	D-7	Q803	*B-2	Q4022	*B-4		
IC500	E-3	Q804	*B-2	Q4023	B-4		
IC502	G-3	Q1000	*B-6	Q4024	*B-4		
IC501	E-3	Q1001	*B-7	Q4025	*E-3		
IC503	F-3	Q1002	*A-7	Q4026	*E-2		
IC504	I-1	Q1003	*B-6	Q4027	*D-2		
IC505	*F-4	Q1004	*A-6	Q4028	*E-3		
IC506	F-3	Q1005	*A-6	Q4029	E-3		
IC507	G-3	Q1006	*A-6	Q4030	*C-4		
IC508	F-4	Q1007	A-6	Q4031	*C-4		
IC509	F-3	Q1008	A-6	Q4032	*C-4		
IC510	G-2	Q1009	A-6	Q4033	*C-4		
IC511	G-3	Q1010	*A-6	Q4034	C-5		
IC512	G-2	Q1011	*A-6	Q4035	C-5		
IC700	E-1	Q1012	*A-6	Q4036	E-3		
IC701	E-1	Q1013	*A-6	Q4037	E-3		
IC702	E-1	Q1014	*C-6	Q4038	*E-3		
IC703	D-2	Q1015	*C-6	Q4039	*D-3		
IC704	H-1	Q1016	*C-5				
IC705	H-1	Q1017	*C-5	D1	*F-2		
IC800	C-2	Q1018	C-5	D100	*C-7		
IC801	B-1	Q1019	*C-5	D101	D-6		
IC1000	B-6	Q1020	*B-6	D102	D-6		
IC1001	B-6	Q1021	B-5	D201	E-5		
IC1002	B-7	Q1023	*B-5	D500	*E-4		
IC1003	C-6	Q1024	*B-5	D501	*E-4		
IC1004	A-6	Q1025	*B-3	D502	*E-4		
IC1005	B-6	Q1022	C-6	D503	*E-4		
IC1006	A-4	Q1026	*A-5	D504	*F-4		
IC1007	A-4	Q1027	*A-4	D505	*F-4		
IC1008	A-3	Q1028	*A-5	D506	*F-4		
IC1009	A-3	Q1029	*C-6	D507	*E-4		
IC1010	A-3	Q1030	*D-4	D508	*E-4		
IC1011	A-3	Q1031	D-4	D509	*E-4		
IC1012	A-3	Q1032	*D-5	D511	*E-3		
IC1013	B-3	Q1033	D-5	D512	G-2		
IC1014	E-3	Q1034	D-6	D513	F-2		
IC2000	H-6	Q1035	*D-6	D514	*I-1		
IC2001	H-6	Q1036	*D-6	D700	*D-1		
IC2002	I-6	Q1037	*D-6	D701	*E-1		
IC2010	H-7	Q1038	*D-5	D702	C-2		
IC2011	H-7	Q1039	D-6	D703	E-1		
IC1027	*B-5	Q1040	*D-5	D704	*E-1		
IC1028	*C-5	Q1041	D-6	D705	E-1		
IC1029	*C-6	Q1042	*D-4	D800	*A-1		
IC1030	D-5	Q1043	*D-4	D801	*B-1		
IC1031	D-4	Q1044	*D-5	D802	*B-1		
IC1032	D-6	Q1045	*E-5	D802	B-1		
IC1033	D-4	Q1046	*E-5	D803	B-1		
IC1034	D-4	Q1047	E-5	D1000	*B-7		
IC1035	D-4	Q1048	*E-5	D1001	*B-7		
IC1036	E-6	Q1049	*E-5	D1002	*B-7		
IC1037	G-7	Q1050	*E-5	D1003	*B-6		
IC1038	E-6	Q1051	*E-5	D1004	*B-6		
IC1039	F-6	Q1052	*E-5	D1005	A-5		
IC1040	F-6	Q1053	E-5	D1006	C-5		
IC1041	G-5	Q1054	E-5	D1007	G-5		
IC1042	F-5	Q1055	E-5	D4000	*A-5		
IC1043	F-5	Q1056	E-5	D4001	*B-6		

B Board Waveforms

① LINE  1.7Vp-p (H)	⑪  580mVp-p (H)	㉑ LINE  3.4Vp-p (14.285MHz)	㉛ YUV  600mVp-p (H)	㊶ YUV  1.6Vp-p (H)	㊶ YUV 3.3Vp-p (H)	㊶ Y/C  800mVp-p (H)
② Y/C  1.7Vp-p (H)	⑫  3.0Vp-p (V)	㉒ SECAM  1Vp-p (2H)	㉜ YUV  1.3Vp-p (H)	㊷ YUV  1.2Vp-p (H)	㊷ YUV  3.5Vp-p (13.3MHz)	㊷ Y/C  680mVp-p (H)
③ Y/C  1.8Vp-p (H)	⑬  3.3Vp-p (H)	㉓ SECAM  1.3Vp-p (2H)	㉝ YUV 1.3Vp-p (H)	㊸ YUV  1.2Vp-p (H)	㊸ Y/C  3.9Vp-p (H)	㊸ Y/C  720mVp-p (H)
④  4.6Vp-p (V)	⑭ 5.2Vp-p (148.7MHz)	㉔ Y/C  920mVp-p (H)	㉞ YUV  1.3Vp-p (H)	㊹ YUV  4.3Vp-p (86MHz)	㊹ Y/C  4.2Vp-p (H)	㊹ Y/C  720mVp-p (H)
⑤  4.8Vp-p (H)	⑮  7.6Vp-p (78MHz)	㉕ Y/C  1.4Vp-p (H)	㉟  5.0Vp-p (V)	㊺ YUV  3.2Vp-p (V)	㊺ Y/C  3.9Vp-p (V)	㊺ Y/C  600mVp-p (H)
⑥ YUV  740mVp-p (H)	⑯  12.5Vp-p (97kHz)	㉖ YUV  3.3Vp-p (H)	㊱  5.0Vp-p (H)	㊻ YUV  3.2Vp-p (H)	㊻ Y/C  4.9Vp-p (H)	
⑦ YUV  600mVp-p (H)	⑰ 3.4Vp-p (3.6MHz)	㉗ YUV  3.3Vp-p (H)	㊲  4.8Vp-p (H)	㊼ YUV  700mVp-p (H)	㊼ Y/C  4.9Vp-p (H)	
⑧ YUV  740mVp-p (H)	⑱ LINE  960mVp-p (H)	㉘ YUV  3.3Vp-p (H)	㊳ YUV  740mVp-p (H)	㊽ YUV  700mVp-p (H)	㊽ Y/C  4.9Vp-p (V)	
⑨ 580mVp-p (H)	⑲ LINE  560Vp-p (H)	㉙ YUV  800mVp-p (H)	㊴ YUV 700mVp-p (H)	㊾ YUV  840mVp-p (H)	㊾ Y/C  4.2Vp-p (V)	
⑩  800mVp-p (H)	⑳ LINE  500mVp-p (H)	㉚ YUV 760mVp-p (H)	㊵ YUV 1.2Vp-p (H)	㊿ YUV  2.2Vp-p (V)	㊿ Y/C 1.3Vp-p (H)	

H1 BOARD

*: B SIDE

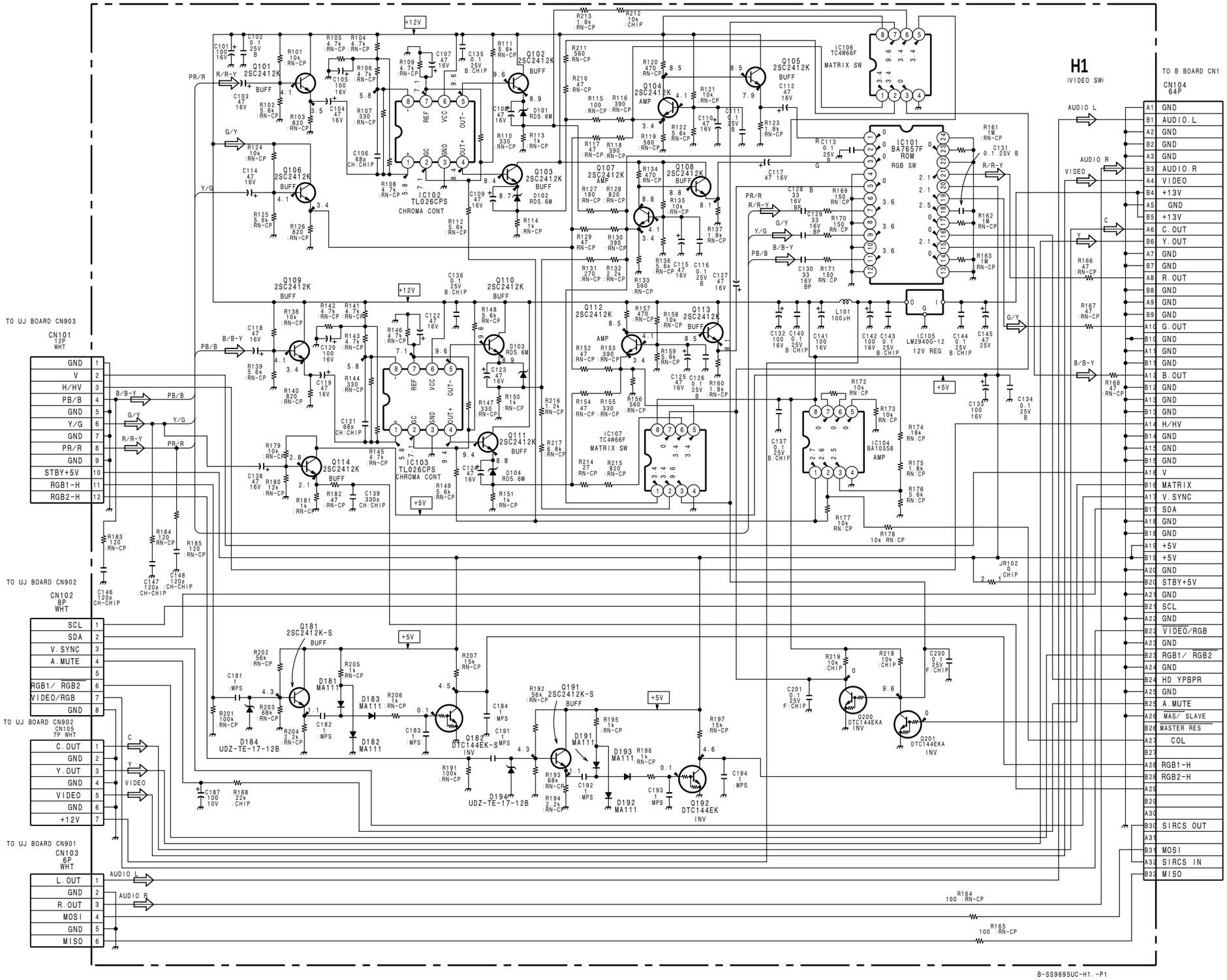
D101	*A-4
D102	*B-5
D103	*B-4
D104	*C-4
D181	*C-3
D182	*C-3
D184	*C-3
D191	*D-2
D192	*D-2
D193	*D-2
D194	*D-3
IC101	*B-2
IC102	*A-5
IC103	*B-5
IC104	*C-2
IC105	A-2
IC106	*B-3
IC107	*B-4
Q101	*A-6
Q102	*A-5
Q103	*B-5
Q104	*A-4
Q105	*A-3
Q106	*B-5
Q107	*B-3
Q108	*B-3
Q109	*C-6
Q110	*B-5
Q111	*C-5
Q112	*B-3
Q113	*B-3
Q114	*C-2
Q181	*C-3
Q182	*C-2
Q191	*D-3
Q192	*D-2
Q200	*B-3
Q201	*C-3

H1 -A SIDE-

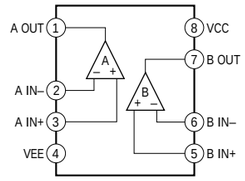
SUFFIX: -11

H1 -B SIDE-

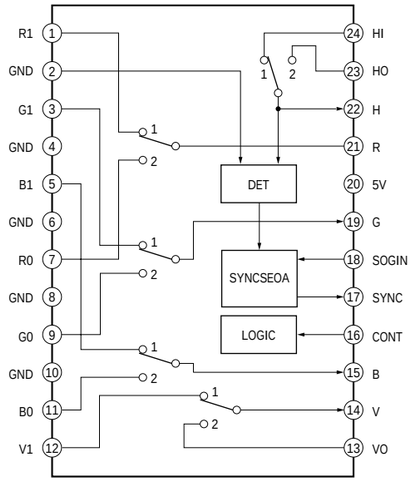
SUFFIX: -11



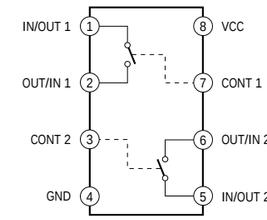
BA10358F-T2 (IC104)



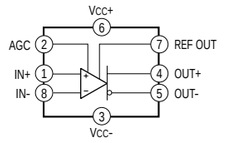
BA7657F-E2 (IC101)

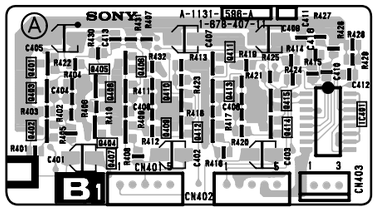


TC4W66F(TE12R) (IC106, IC107)

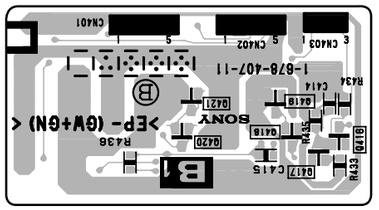


TL026CPS-E05 (IC102, IC103)

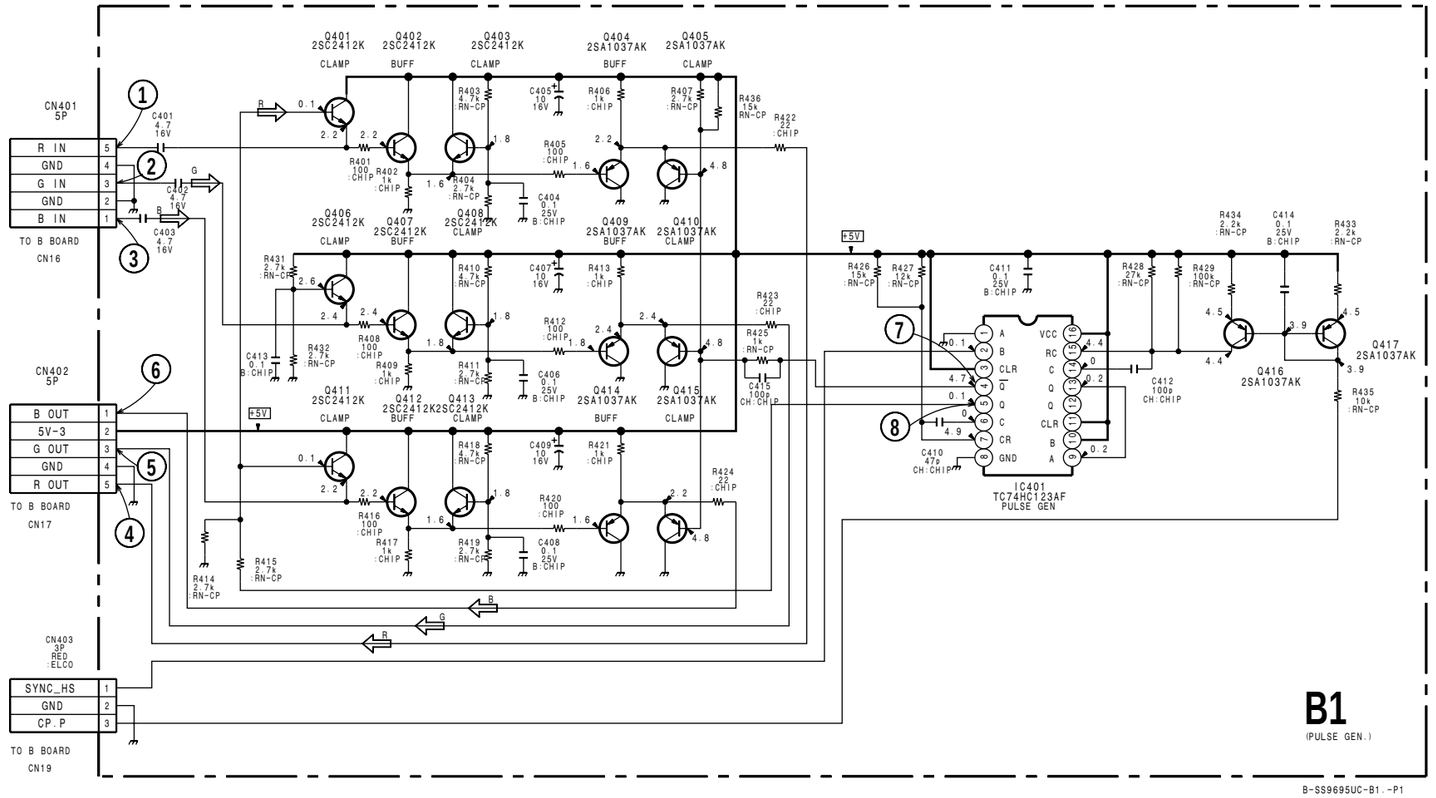




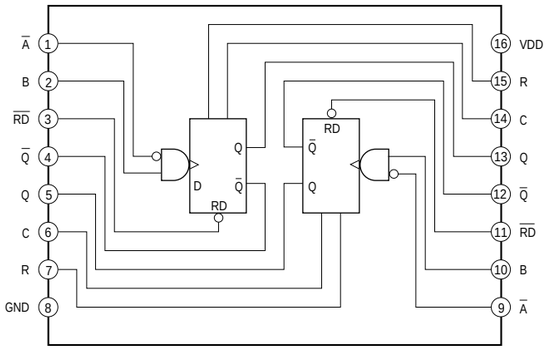
B1 -A SIDE-
SUFFIX: -11



B1 -B SIDE-
SUFFIX: -11

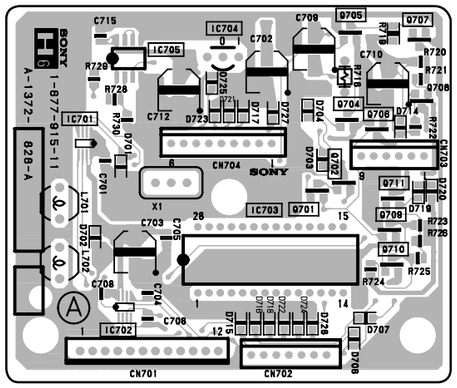


TC74HC123AF(EL) (IC401)



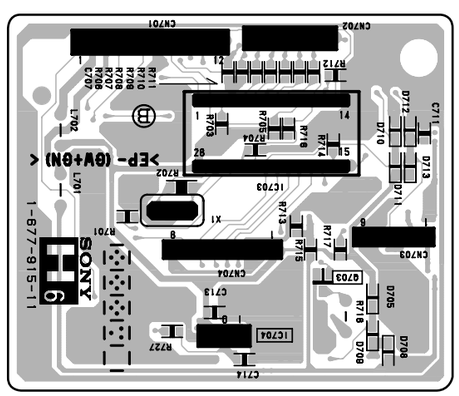
B1 Board Waveforms

① Y/C 600mVp-p (H)	② Y/C 680mVp-p (H)	③ Y/C 580mVp-p (H)	④ Y/C 400mVp-p (H)
⑤ Y/C 680mVp-p (H)	⑥ Y/C 420mVp-p (H)	⑦ Y/C 4.8Vp-p (H)	⑧ Y/C 4.8Vp-p (H)



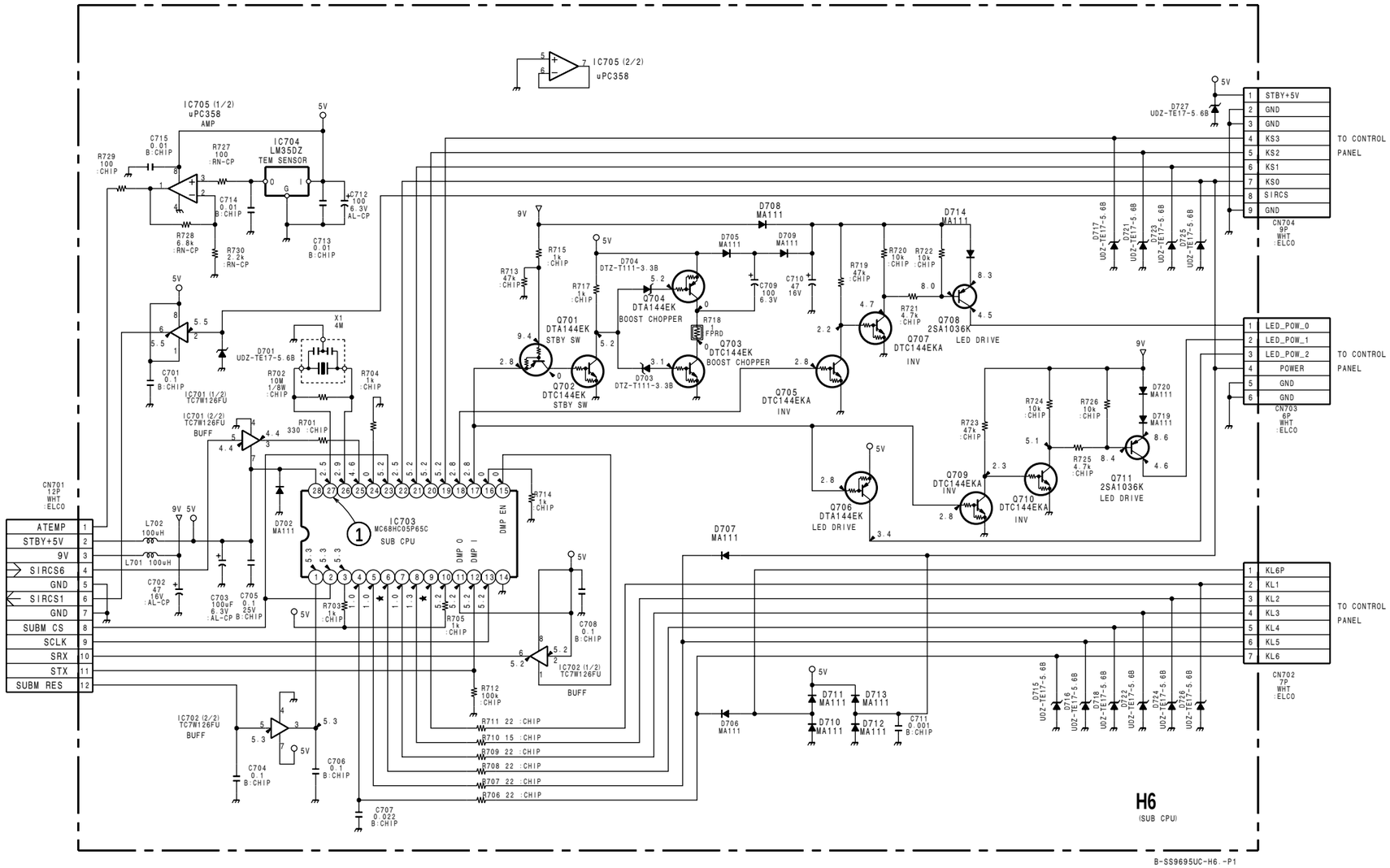
H6 -A SIDE-

SUFFIX: -11

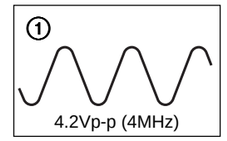


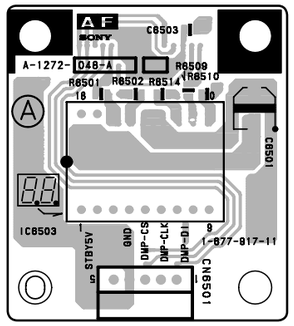
H6 -B SIDE-

SUFFIX: -11

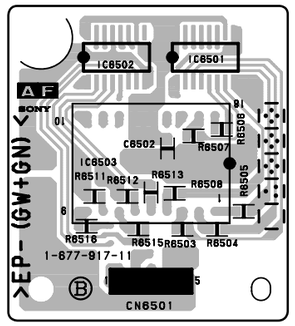


H6 Board Waveform

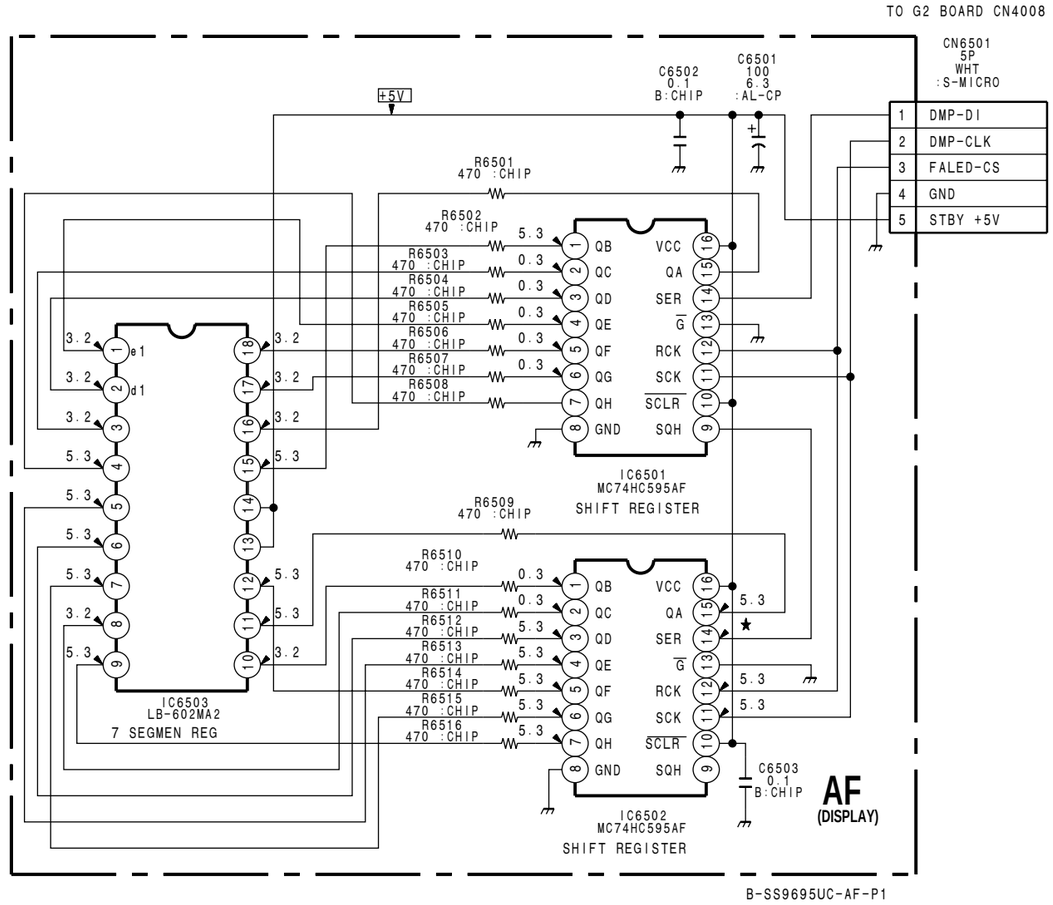




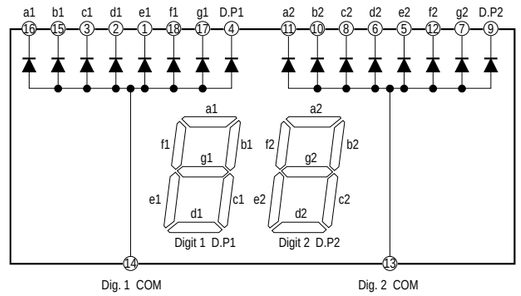
AF -A SIDE-
SUFFIX: -11



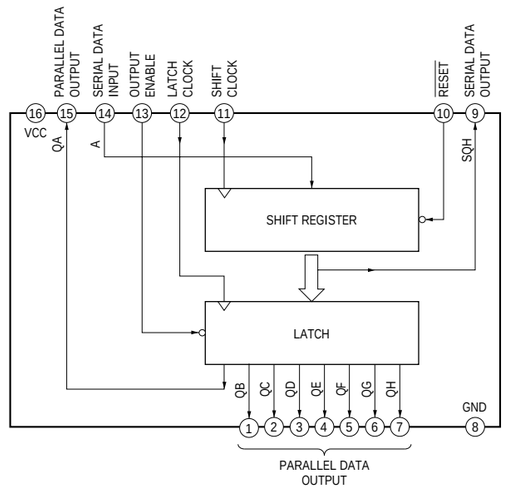
AF -B SIDE-
SUFFIX: -11

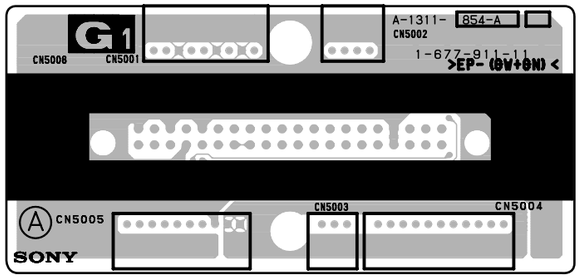


LB-602MA2 (IC6503)

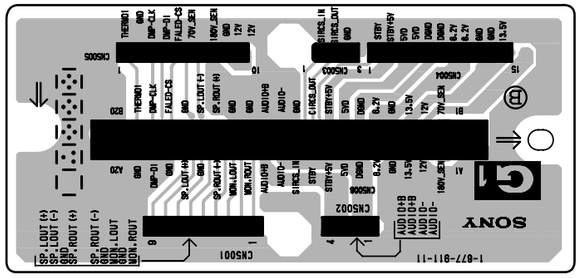


MC74HC595AF-T2 (IC6501, IC6502)

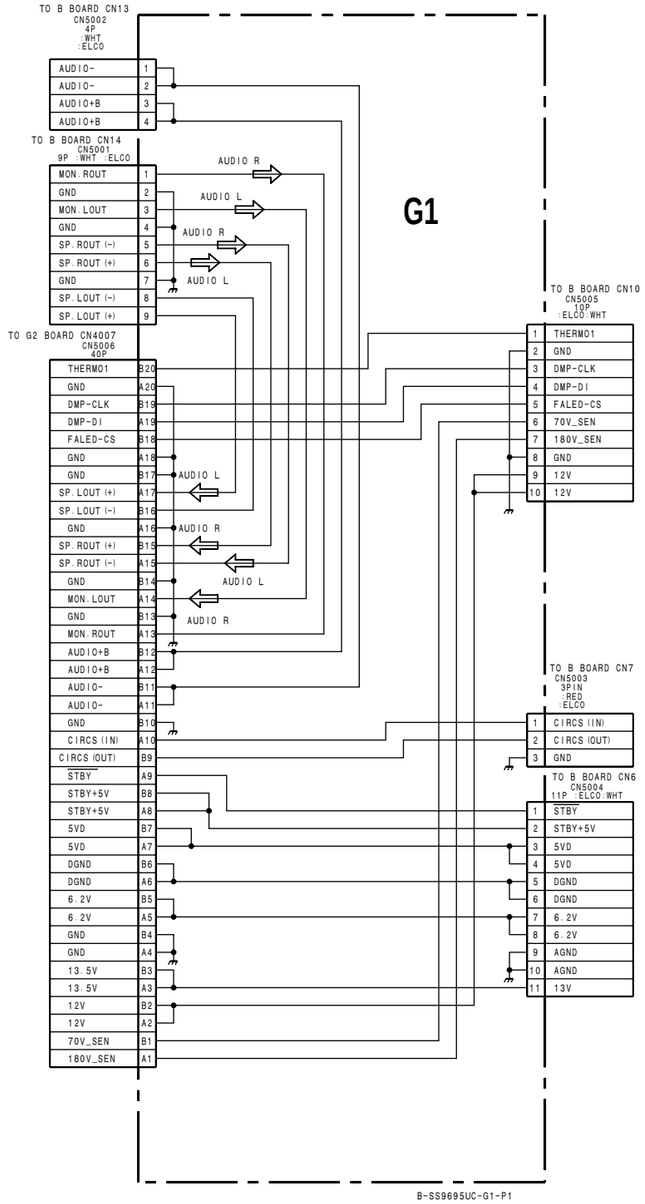


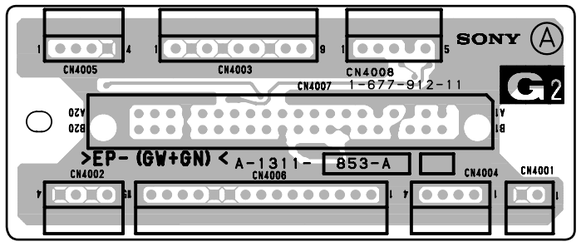


G1 -A SIDE-
SUFFIX: -11

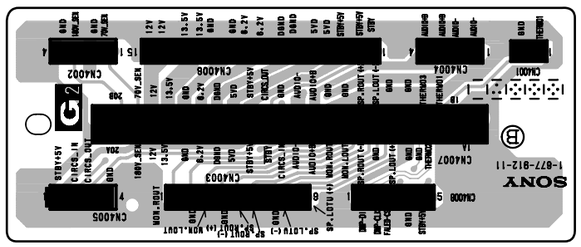


G1 -B SIDE-
SUFFIX: -11

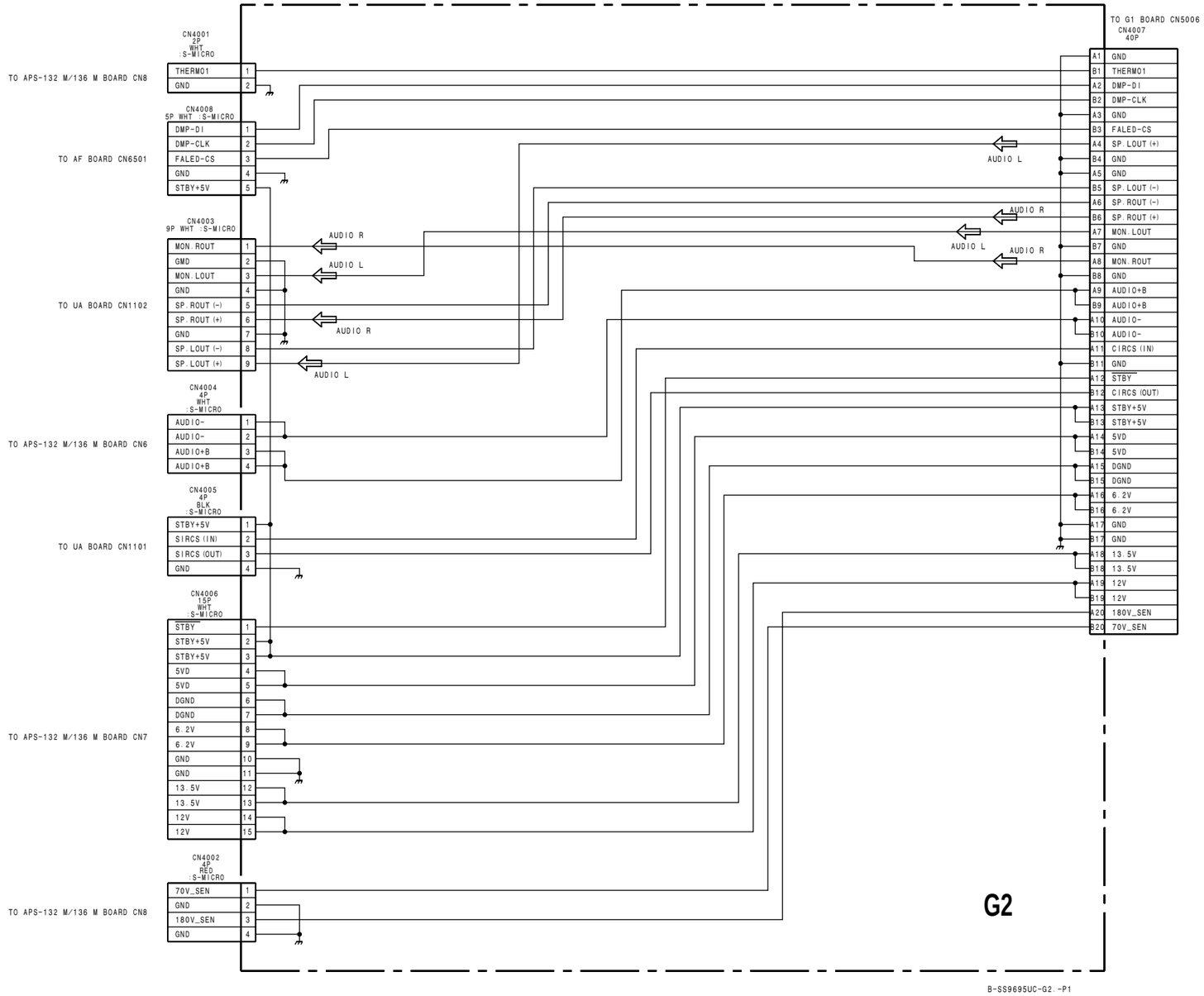


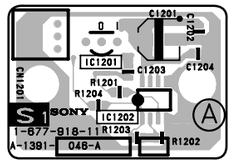


G2 -A SIDE-
SUFFIX: -11

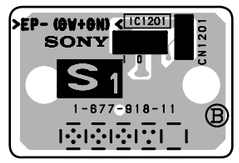


G2 -B SIDE-
SUFFIX: -11

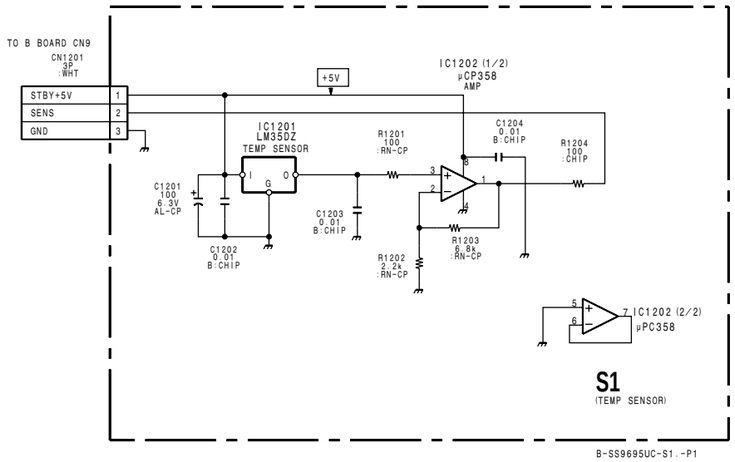




S1 **-A SIDE-**
SUFFIX: -11

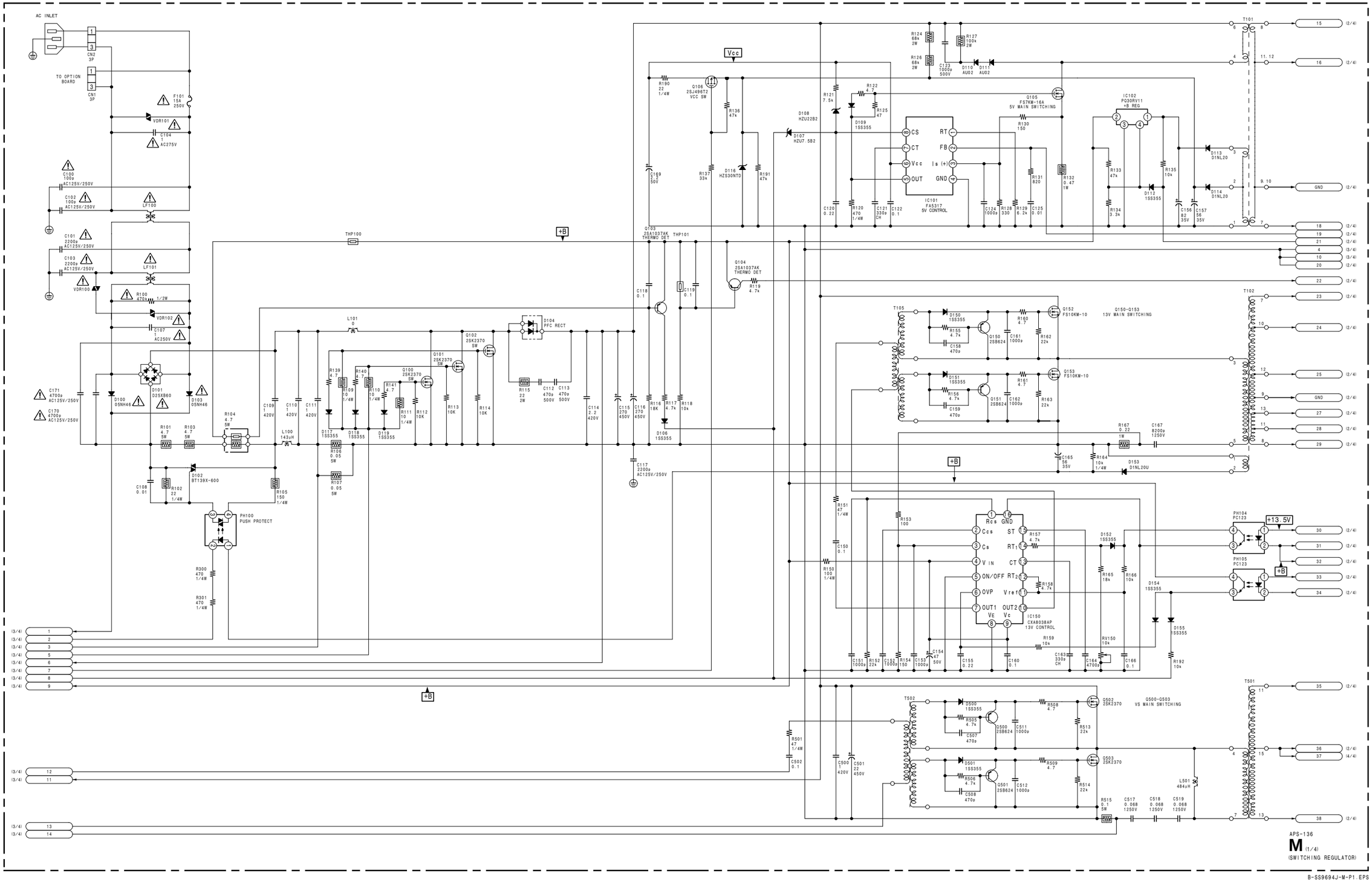


S1 **-B SIDE-**
SUFFIX: -11



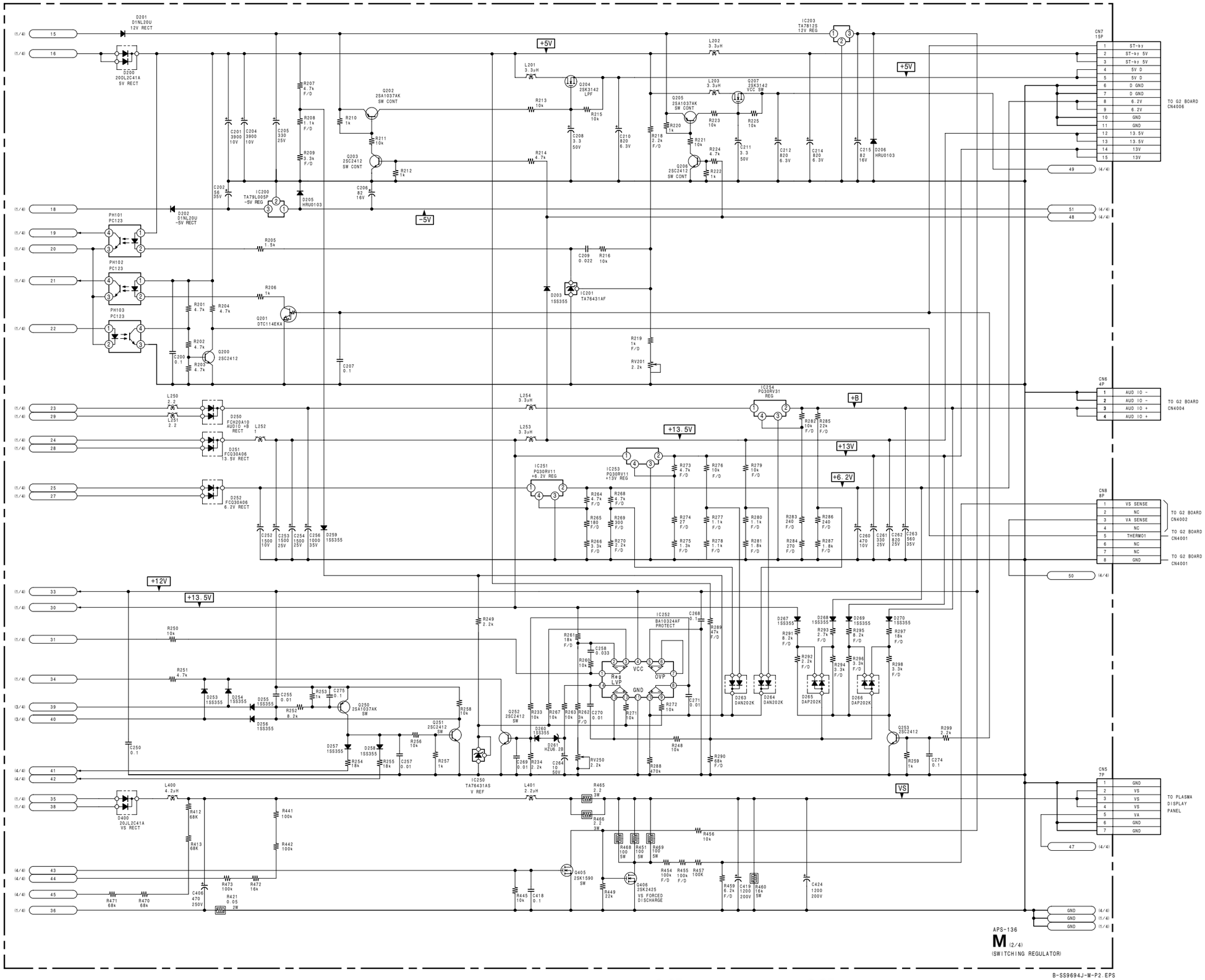
APS-136 M (1/4)

PFM-500A3W

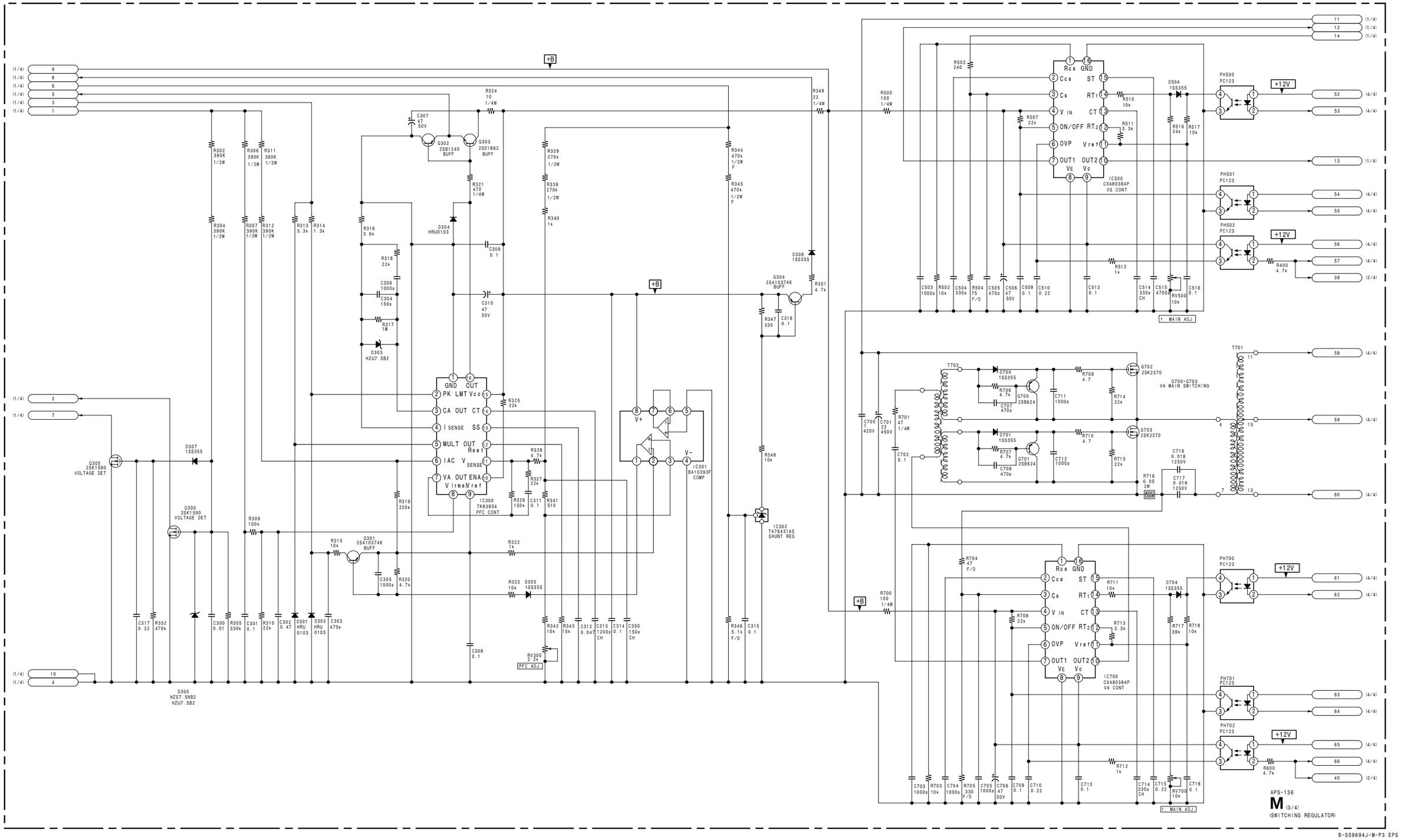


9-36

A B C D E F G H


D201 D1NL20U 12V RECT
D200 20DL2C41A 5V RECT
D202 D1NL20U -5V RECT
IC200 TA79L05SP -5V REG
IC203 TA7812S 12V REG
+5V
-5V
+12V
+13.5V
+13V
+6.2V
+B
VS
Q202 2SA1037AK SW CONT
Q203 2SC2412 SW CONT
Q204 2SK3142 LPF
Q205 2SA1037AK SW CONT
Q206 2SC2412 SW CONT
Q207 2SK3142 VCC SW
Q200 2SC2412
Q201 DTC114EKA
Q250 2SA1037AK SW
Q251 2SC2412 SW
Q252 2SC2412 SW
Q253 2SC2412
Q405 2SK1590 SW
Q406 2SK2425 VS FORCED DISCHARGE
PH101 PC123
PH102 PC123
PH103 PC123
IC201 TA76431AF
IC250 TA76431AS V REF
IC251 PQ30RV11 +6.2V REG
IC252 BA10324AF PROTECT
IC253 PQ30RV11 +13V REG
IC254 PQ30RV31 REG
D203 1SS355
D205 HRU0103
D206 HRU0103
D207 FCH20A10 AUDIO +B RECT
D250 FCH20A10 AUDIO +B RECT
D251 FCQ30A06 13.5V RECT
D252 FC030A06 6.2V RECT
D259 1SS355
D260 1SS355
D261 HZU6.2B
D263 DAN202K
D264 DAN202K
D265 DAP202K
D266 DAP202K
D267 1SS355
D268 1SS355
D269 1SS355
D270 1SS355
D400 20JL2C41A VS RECT
L201 3.3µH
L202 3.3µH
L203 3.3µH
L250 2.2
L251 2.2
L252 1
L253 3.3µH
L254 3.3µH
L400 4.2µH
L401 2.2µH
IC200 TA79L05SP -5V REG
C200 0.1
C201 3900 10V
C202 56 35V
C204 3900 10V
C205 330 25V
C206 82 16V
C207 0.1
C208 3.3 50V
C209 0.022
C210 820 6.3V
C211 3.3 50V
C212 820 6.3V
C214 820 6.3V
C215 82 16V
C250 0.1
C252 1500 10V
C253 1500 25V
C254 1500 25V
C256 1000 35V
C255 0.01
C258 0.033
C260 470 10V
C261 330 25V
C262 820 25V
C263 560 35V
C268 0.1
C269 0.01
C270 0.01
C271 0.01
C274 0.1
C275 0.1
C406 470 250V
C418 0.1
C419 1200 200V
C424 1200 200V
R205 1.5k
R206 1k
R207 4.7k F/D
R208 1.1k F/D
R209 3.3k F/D
R210 1k
R211 10k
R212 1k
R213 10k
R214 4.7k
R215 10k
R216 10k
R218 2.2k F/D
R219 1k F/D
R220 1k
R221 10k
R222 1k
R223 10k
R224 4.7k
R225 10k
RV201 2.2k
RV250 2.2k
R249 2.2k
R248 10k
R250 10k
R251 4.7k
R252 8.2k
R253 1k
R254 18k
R255 18k
R256 10k
R257 1k
R258 10k
R261 18k F/D
R262 3k F/D
R263 10k
R267 10k
R269 10k
R271 10k
R272 10k
R273 4.7k F/D
R274 27 F/D
R275 1.3k F/D
R276 10k F/D
R277 1.1k F/D
R278 1.1k F/D
R279 10k F/D
R280 1.1k F/D
R281 1.8k F/D
R282 10k F/D
R283 240 F/D
R284 270 F/D
R285 22k F/D
R286 240 F/D
R287 1.8k F/D
R288 470k
R289 47k F/D
R290 68k F/D
R291 8.2k F/D
R292 2.2k F/D
R293 2.7k F/D
R294 3.3k F/D
R295 8.2k F/D
R296 3.3k F/D
R297 18k F/D
R298 3.3k F/D
R299 2.2k
R233 10k
R234 8.2k
R441 100k
R442 100k
R412 68K
R413 68K
R470 68k
R471 68k
R472 16k
R473 100k
R421 0.05 2W
R445 10k
R449 22k
R454 100k F/D
R455 100k F/D
R457 100K
R456 10k
R459 6.2k F/D
R460 16k 5W
R465 2.2 3W
R466 2.2 3W
R468 100 5W
R451 100 5W
R469 100 5W
CN7 15P
CN6 4P
CN8 8P
CN5 7P
TO G2 BOARD CN4006
TO G2 BOARD CN4004
TO G2 BOARD CN4002
TO G2 BOARD CN4001
TO G2 BOARD CN4001
TO PLASMA DISPLAY PANEL
APS-136
M (2/4)
(SWITCHING REGULATOR)
B-SS9694J-M-P2.EPS

APS-136 M (3/4)



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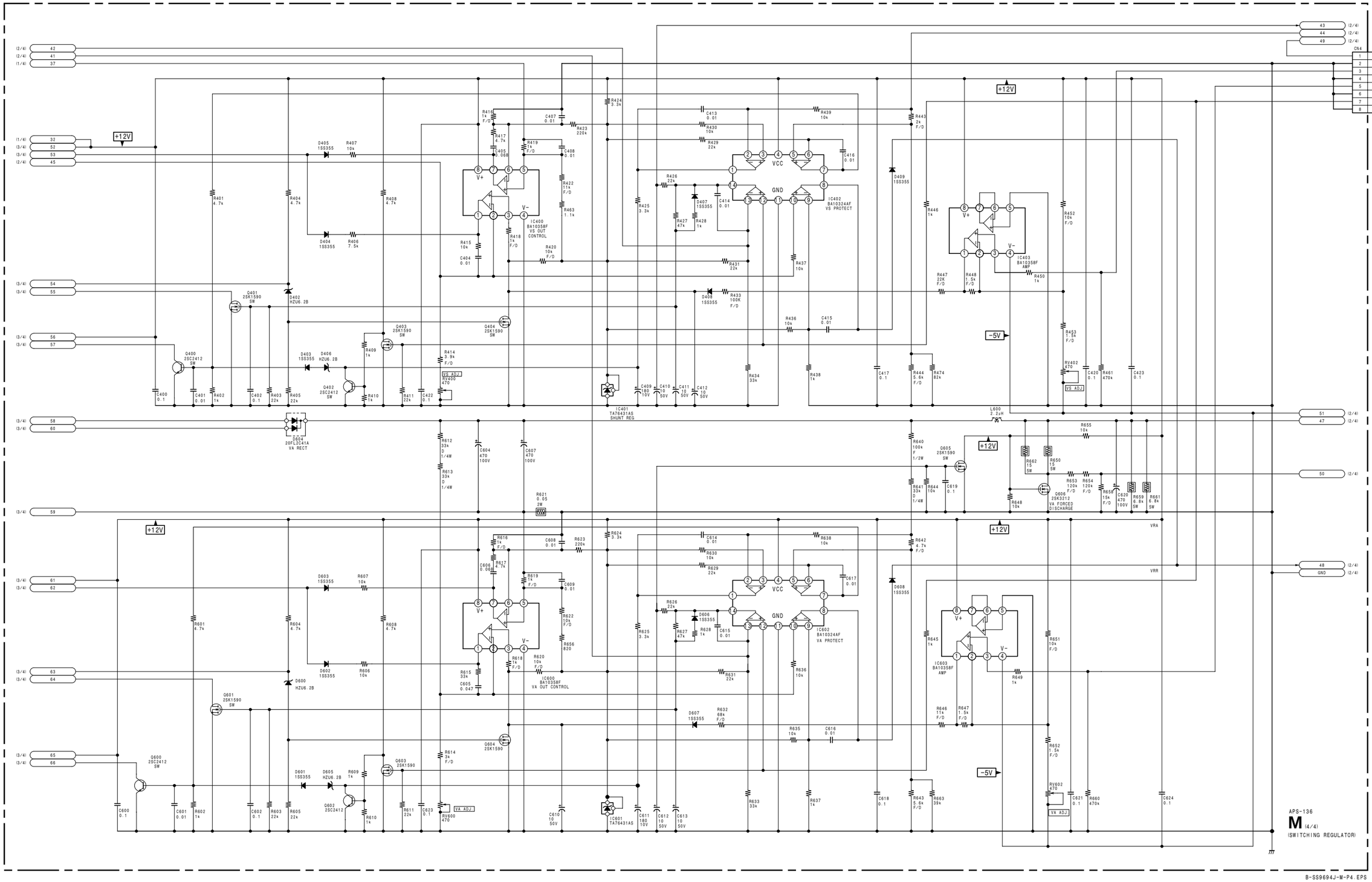
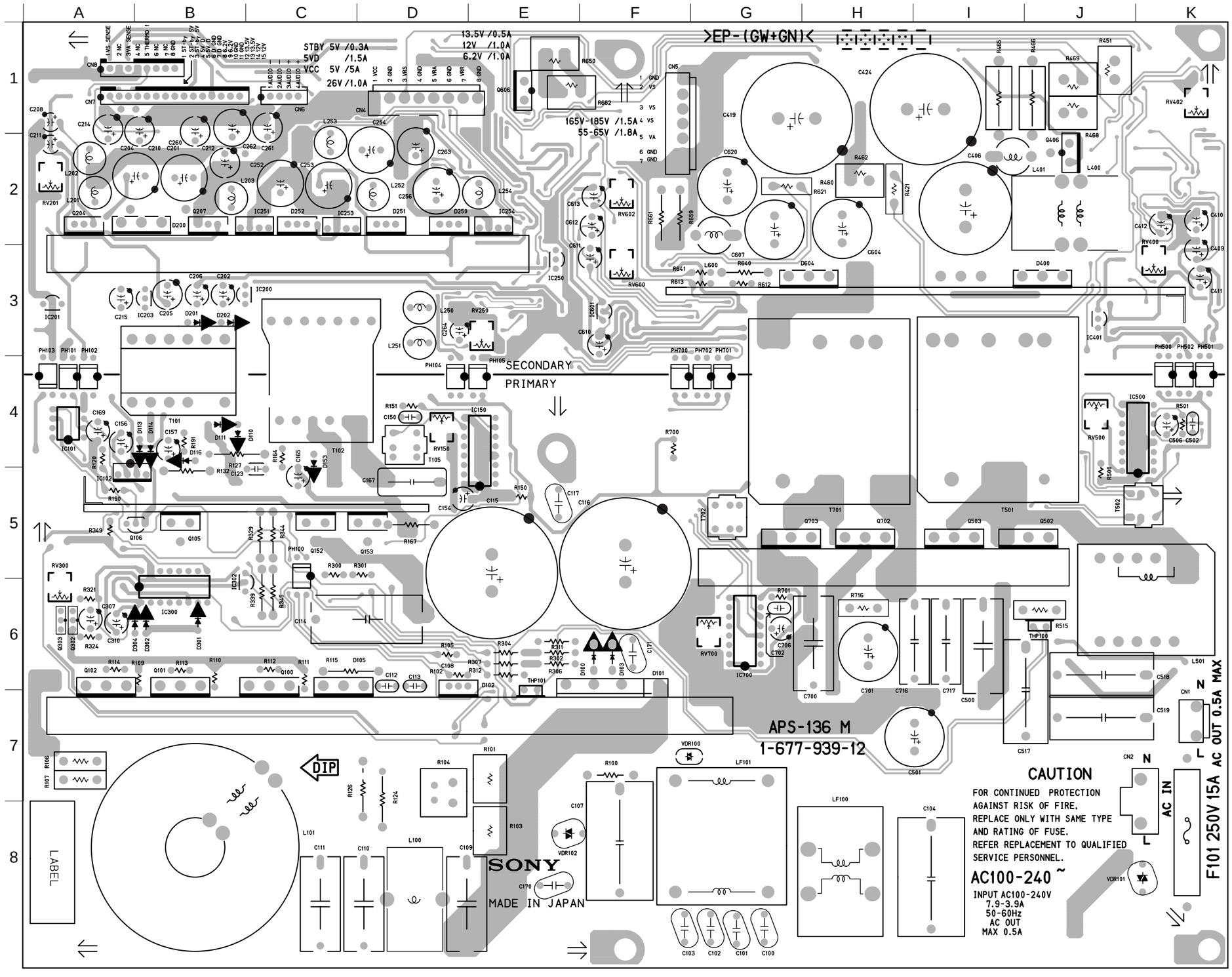
APS-136 M (4/4)


(2/4) 42
(2/4) 41
(1/4) 37
(1/4) 32
(3/4) 52
(3/4) 53
(2/4) 45
(3/4) 54
(3/4) 55
(3/4) 56
(3/4) 57
(3/4) 58
(3/4) 60
(3/4) 59
(3/4) 61
(3/4) 62
(3/4) 63
(3/4) 64
(3/4) 65
(3/4) 66
+12V
-5V
VCC
GND
V+
V-
IC400 BA10358F VS OUT CONTROL
IC401 TA76431AS SHUNT REG
IC402 BA10324AF VS PROTECT
IC403 BA10358F AMP
IC600 BA10358F VA OUT CONTROL
IC601 TA76431AS
IC603 BA10358F AMP
Q400 2SC2412 SW
Q401 2SK1590 SW
Q402 2SC2412 SW
Q403 2SK1590 SW
Q404 2SK1590 SW
Q600 2SC2412 SW
Q601 2SK1590 SW
Q602 2SC2412
Q603 2SK1590
Q604 2SK1590
Q605 2SK1590 SW
Q606 2SK3212 VA FORCED DISCHARGE
D400 1SS355
D401 1SS355
D402 HZU6.2B
D403 1SS355
D404 1SS355
D405 1SS355
D406 HZU6.2B
D407 1SS355
D408 1SS355
D409 1SS355
D600 HZU6.2B
D601 1SS355
D602 1SS355
D603 1SS355
D604 20FLC241A VA RECT
D605 HZU6.2B
D606 1SS355
D607 1SS355
D608 1SS355
IC402 BA10324AF VS PROTECT
VS ADJ
VA ADJ
L600 2.2uH
CN4
1 VCC
2 GND
3 VRS
4 GND
5 VRA
6 GND
7 VRR
8 GND
TO PLASMA DISPLAY PANEL
43 (2/4)
44 (2/4)
49 (2/4)
51 (2/4)
47 (2/4)
50 (2/4)
48 (2/4)
GND (2/4)
VRA
VRR
APS-136
M (4/4)
(SWITCHING REGULATOR)
B-SS9694J-M-P4.EPS

PFM-500A3W



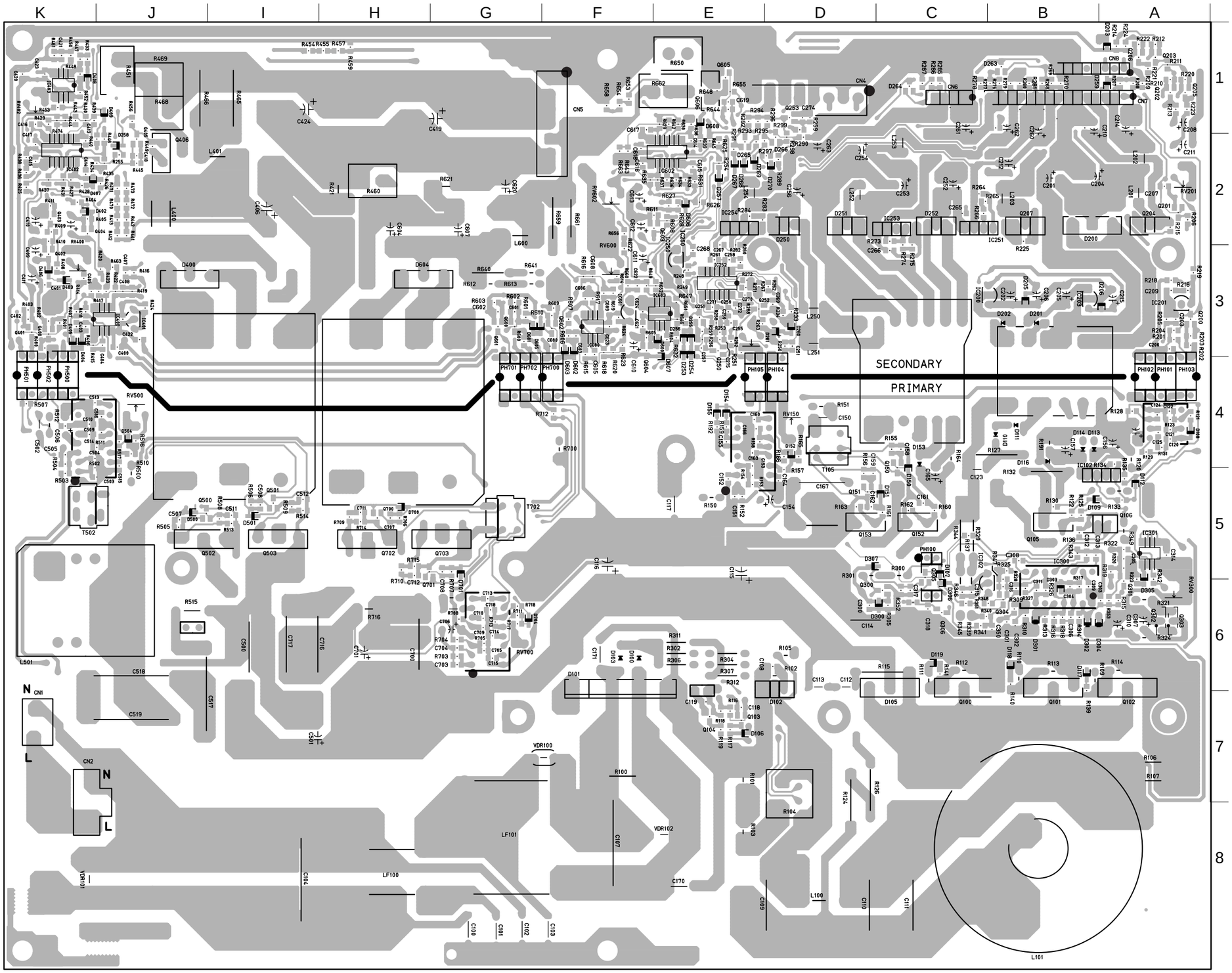
M BOARD (APS-136)

* : B SIDE

D100	F-6	IC203	B-3	Q100	C-6
D101	F-6	IC250	E-3	Q101	B-6
D102	D-6	IC251	C-2	Q102	A-6
D103	F-6	IC252	*E-3	Q103	*E-7
D105	C-6	IC253	C-2	Q104	*E-7
D106	*E-7	IC254	E-2	Q105	B-5
D107	*C-5	IC300	B-6	Q106	A-5
D108	*A-4	IC301	*A-5	Q150	*C-4
D109	*B-5	IC302	B-6	Q151	*D-5
D110	B-4	IC400	*J-3	Q152	C-5
D111	B-4	IC401	J-3	Q153	D-5
D112	*A-5	IC402	*K-2	Q200	*A-3
D113	B-4	IC403	*K-1	Q201	*A-2
D114	B-4	IC500	K-4	Q202	*A-1
D116	B-4	IC600	*F-3	Q203	*A-1
D117	*B-6	IC601	F-3	Q204	A-2
D118	*B-6	IC602	*E-2	Q205	*A-1
D119	*C-6	IC603	*E-3	Q206	*A-1
D150	*C-4	IC700	G-6	Q207	B-2
D151	*C-5			Q250	*E-3
D152	*D-4			Q251	*E-3
D153	C-4			Q252	*E-3
D154	*E-4			Q253	*D-1
D155	*E-4			Q300	*D-6
D200	B-2			Q301	*A-6
D201	B-3			Q302	A-6
D202	B-3			Q303	A-6
D203	*A-1			Q304	*B-6
D205	*B-3			Q305	*C-5
D206	*A-3			Q306	*C-6
D250	D-2			Q400	*K-3
D251	D-2			Q401	*K-3
D252	C-2			Q402	*K-3
D253	*E-3			Q403	*K-2
D254	*E-3			Q404	*J-2
D255	*E-3			Q405	*J-2
D256	*E-3			Q406	J-2
D257	*E-2			Q500	*J-5
D258	*J-2			Q501	*I-5
D259	*A-1			Q502	J-5
D260	*D-3			Q503	I-5
D261	*D-3			Q600	*G-3
D263	*C-1			Q601	*G-3
D264	*C-1			Q602	*F-3
D265	*E-2			Q603	*E-2
D266	*D-2			Q604	*F-3
D267	*E-2			Q605	*E-1
D268	*E-2			Q606	E-1
D269	*E-2			Q700	*H-5
D270	*D-2			Q701	*H-6
D300	*C-6			Q702	H-5
D301	B-6			Q703	G-5
D302	B-6				
D303	*B-6			RV150	D-4
D304	B-6			RV201	A-2
D305	*A-6			RV250	E-3
D306	*C-6			RV300	A-6
D307	*D-5			RV400	K-3
D400	J-3			RV402	K-1
D402	*K-2			RV500	J-4
D403	*K-3			RV600	F-3
D404	*K-3			RV602	F-2
D405	*K-3			RV700	G-6
D406	*K-3				
D407	*K-2			THP100	J-6
D408	*K-1			THP101	E-6
D409	*J-1				
D500	*J-5				
D501	*I-5				
D504	*J-4				
D600	*E-3				
D601	*G-3				
D602	*F-3				
D603	*F-3				
D604	H-3				
D605	*G-3				
D606	*E-2				
D607	*E-3				
D608	*E-1				
D700	*H-5				
D701	*G-5				
D704	*G-6				
IC101	A-4				
IC102	A-5				
IC150	E-4				
IC200	C-3				
IC201	A-3				

APS-136 M -A SIDE-

SUFFIX: -12


K
J
I
H
G
F
E
D
C
B
A
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2
3
4
5
6
7
8
SECONDARY
PRIMARY
N
L
CN1
CN2
L501
L101
T502
T702
T105
IC201
IC251
IC253
IC300
IC301
IC602
IC683
IC254
IC252
Q406
Q502
Q503
Q702
Q703
Q701
Q100
Q101
Q102
Q103
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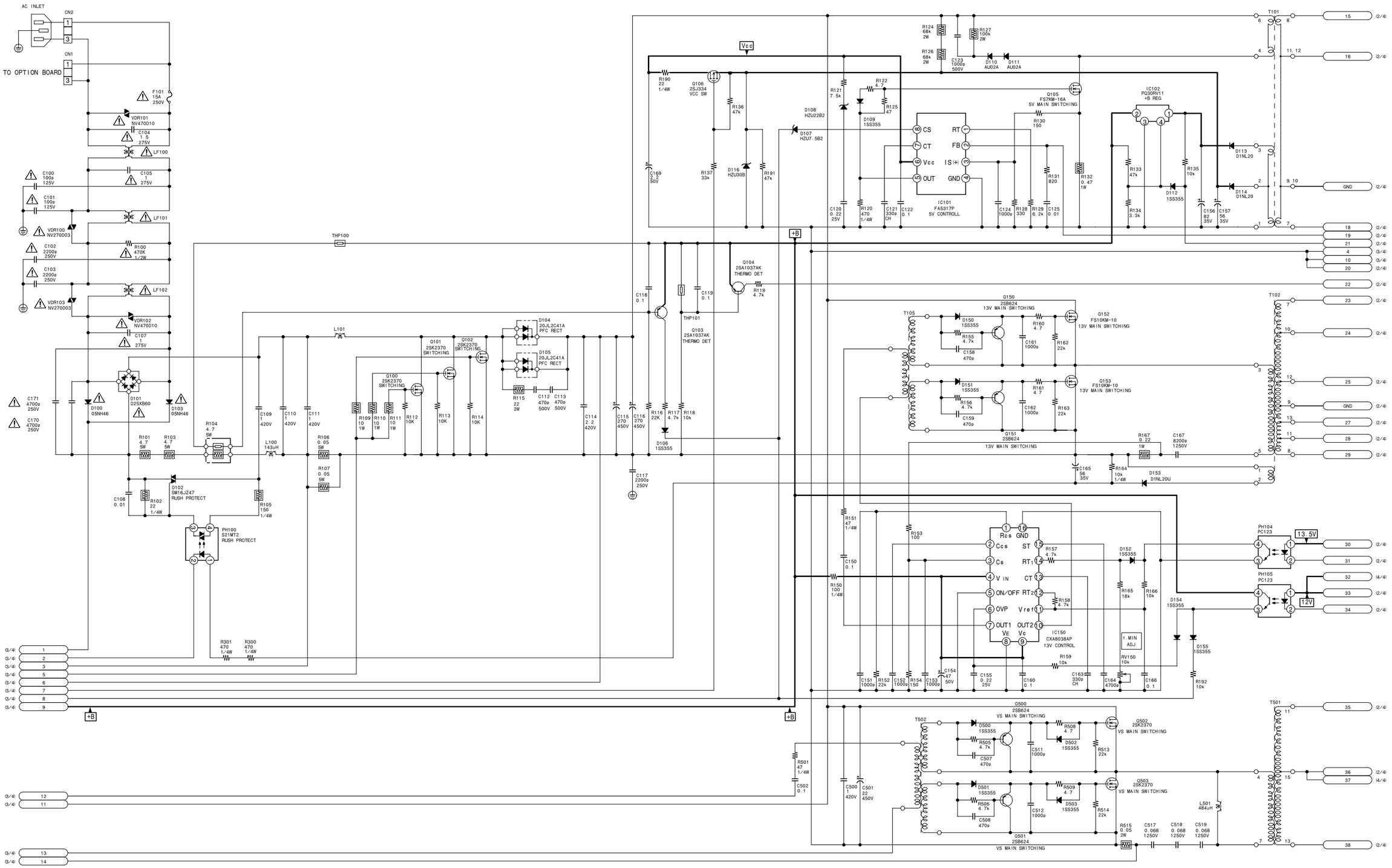
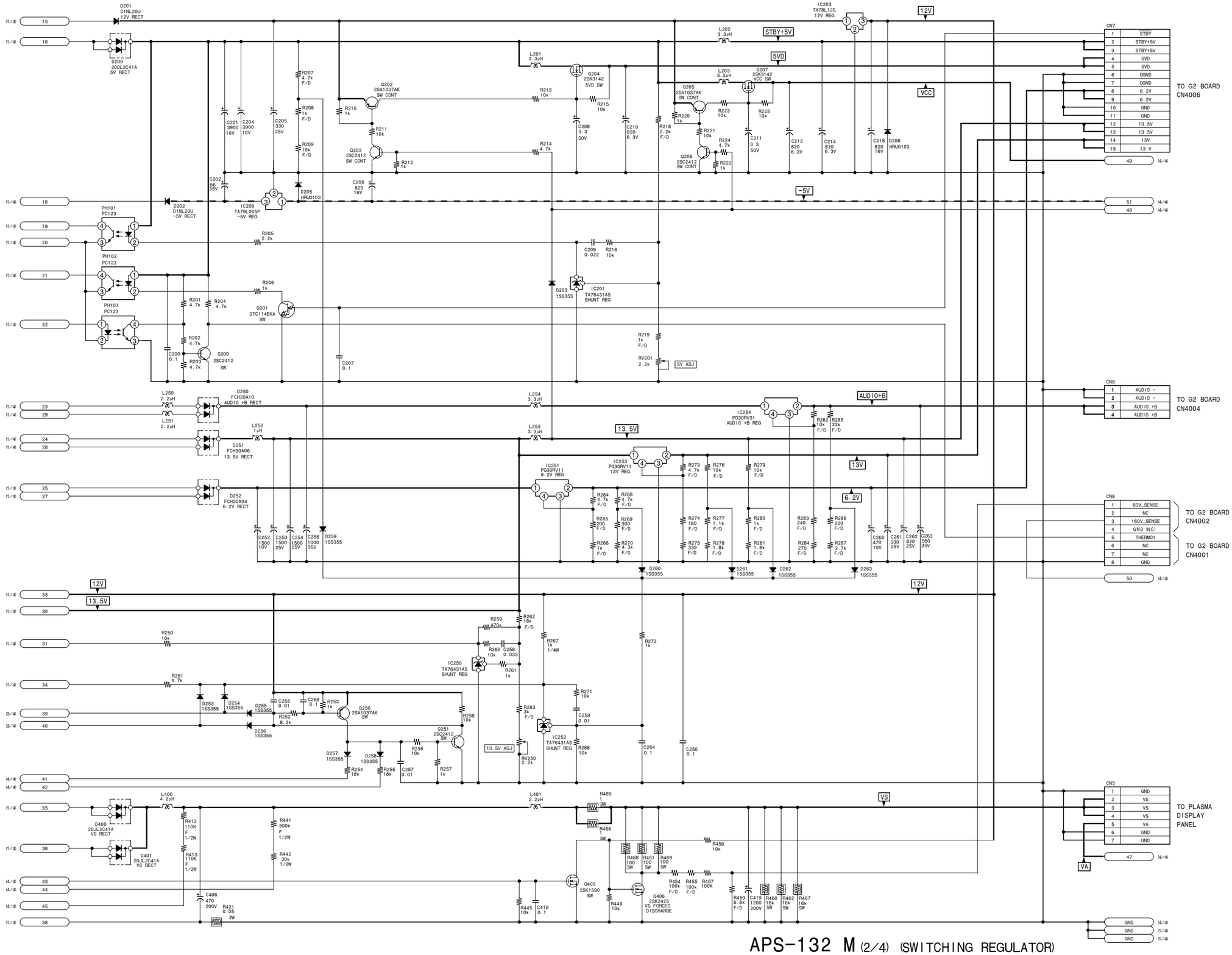
Q639

PFM-510A2W

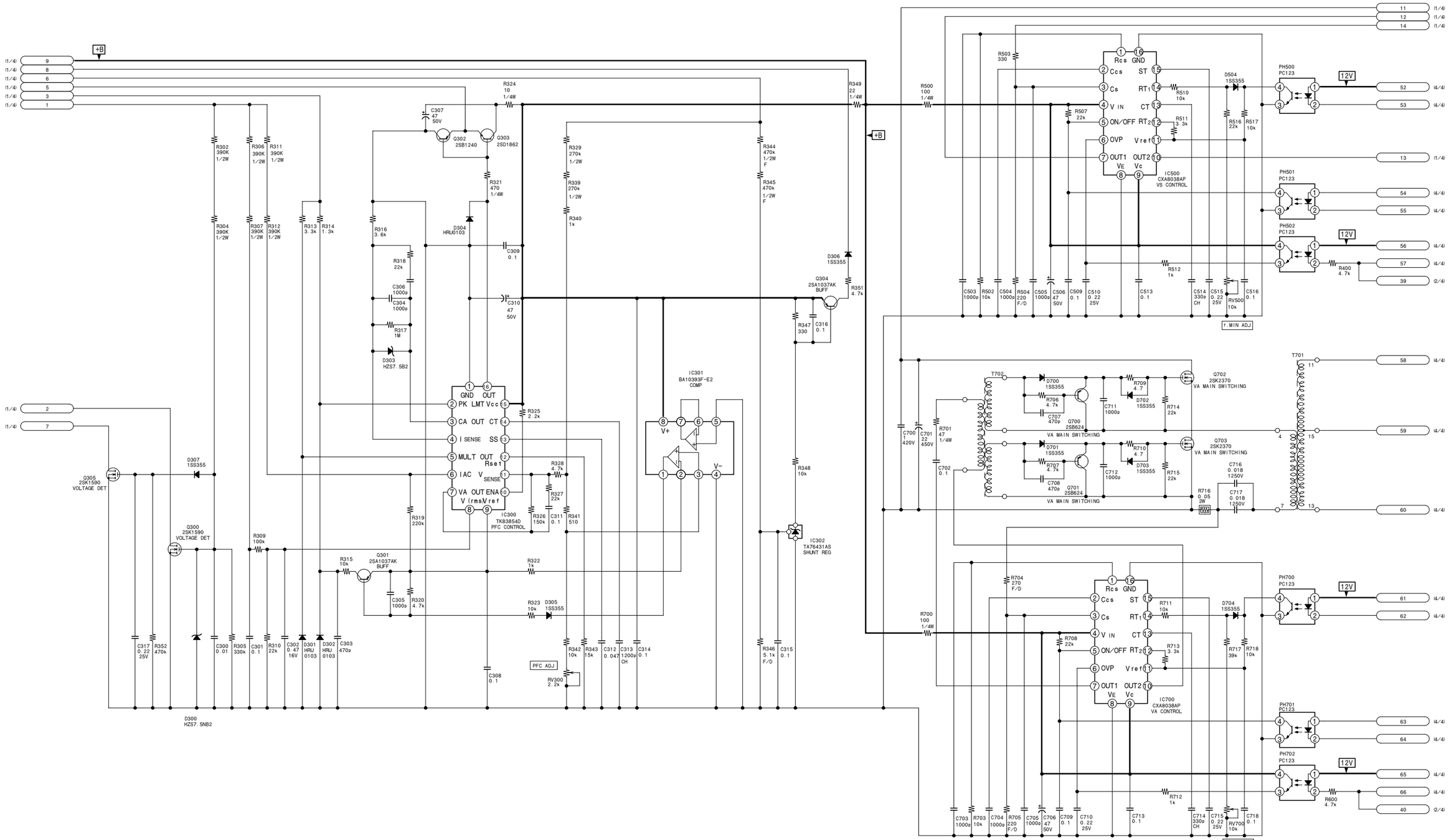


APS-132 M (1/4) (SWITCHING REGULATOR)



APS-132 M (2/4) (SWITCHING REGULATOR)

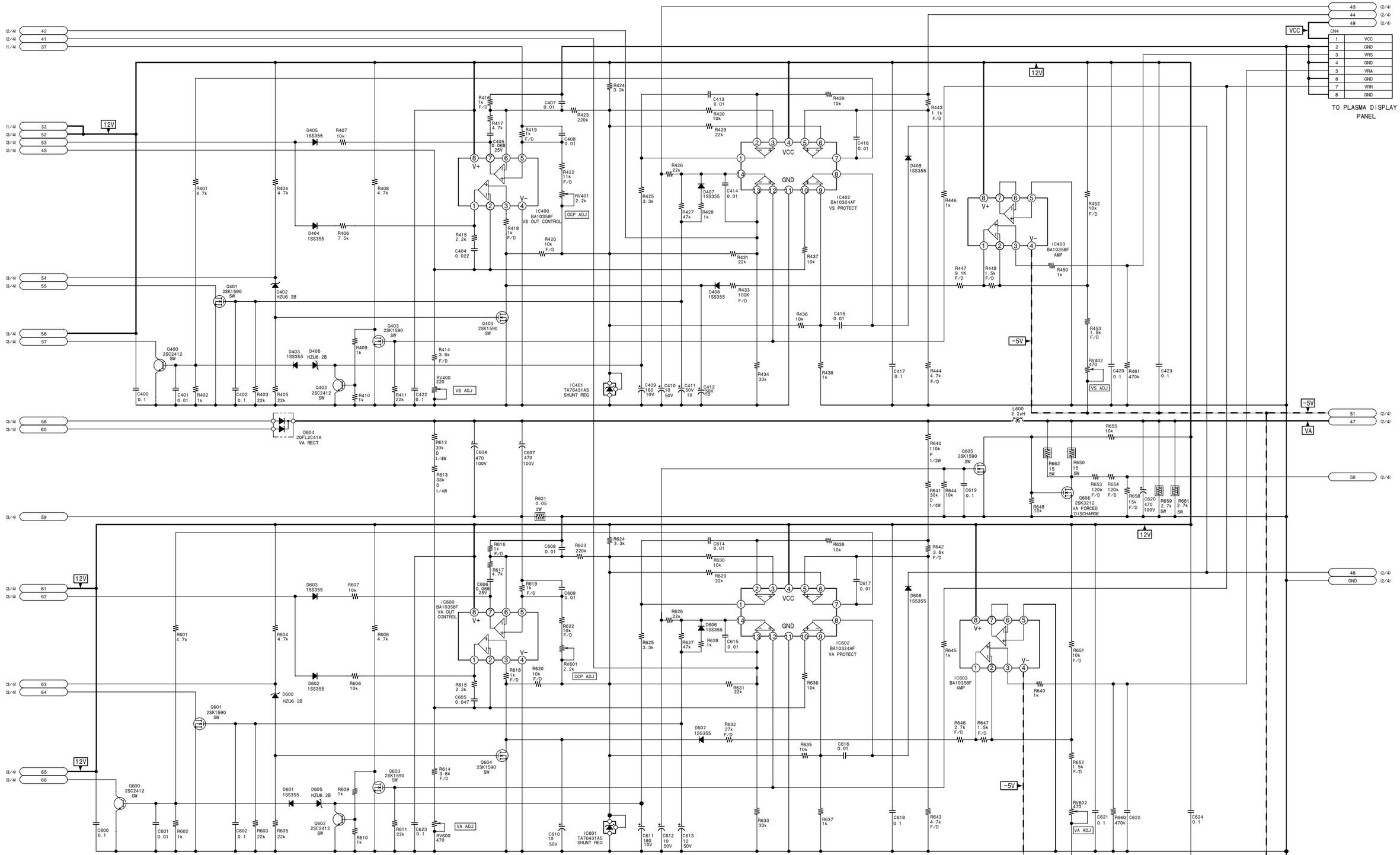
APS-132 M (3/4)



APS-132 M (3/4) (SWITCHING REGULATOR)

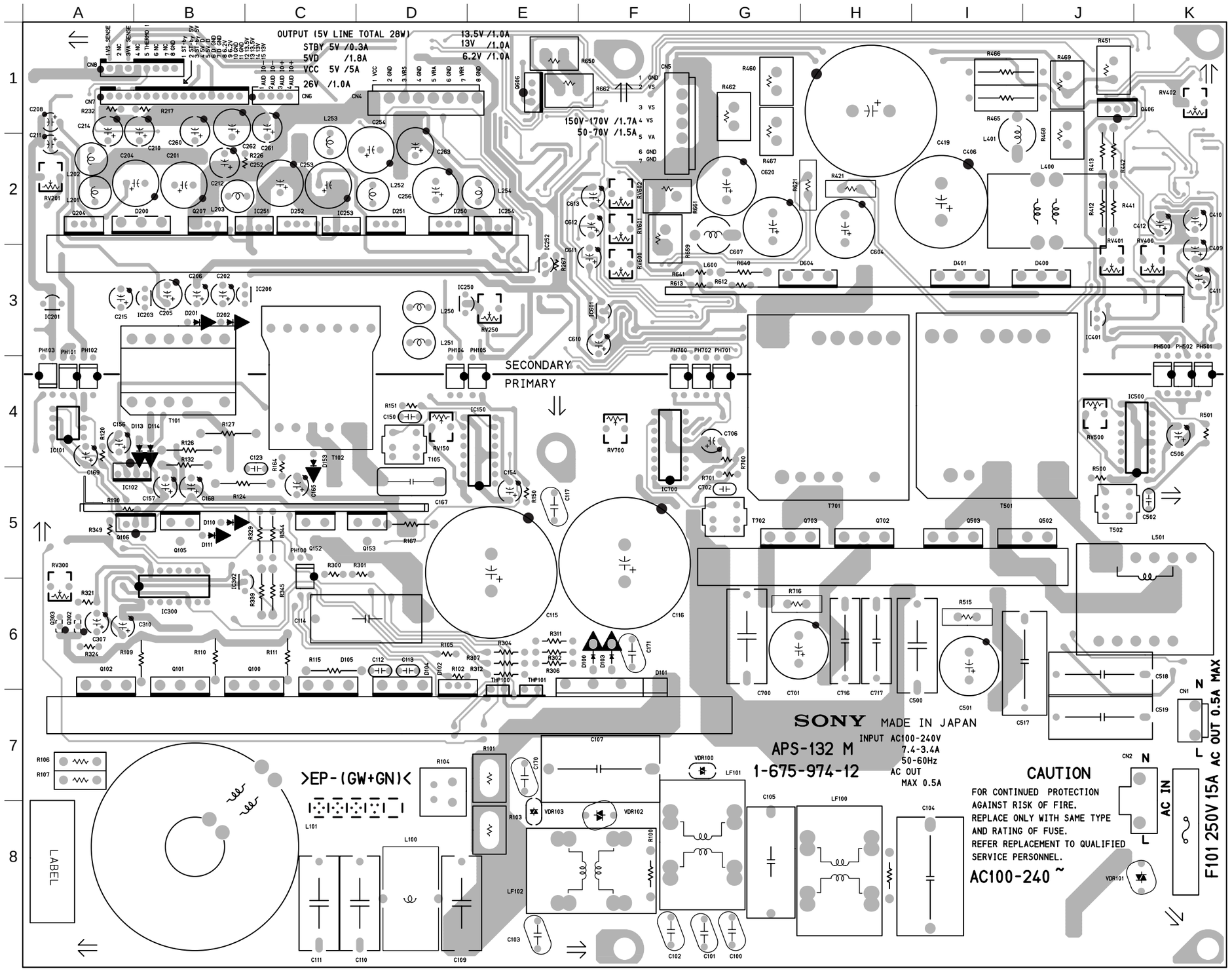
9-44

APS-132 M (4/4)



APS-132 M (4/4) (SWITCHING REGULATOR)

PFM-510A2W



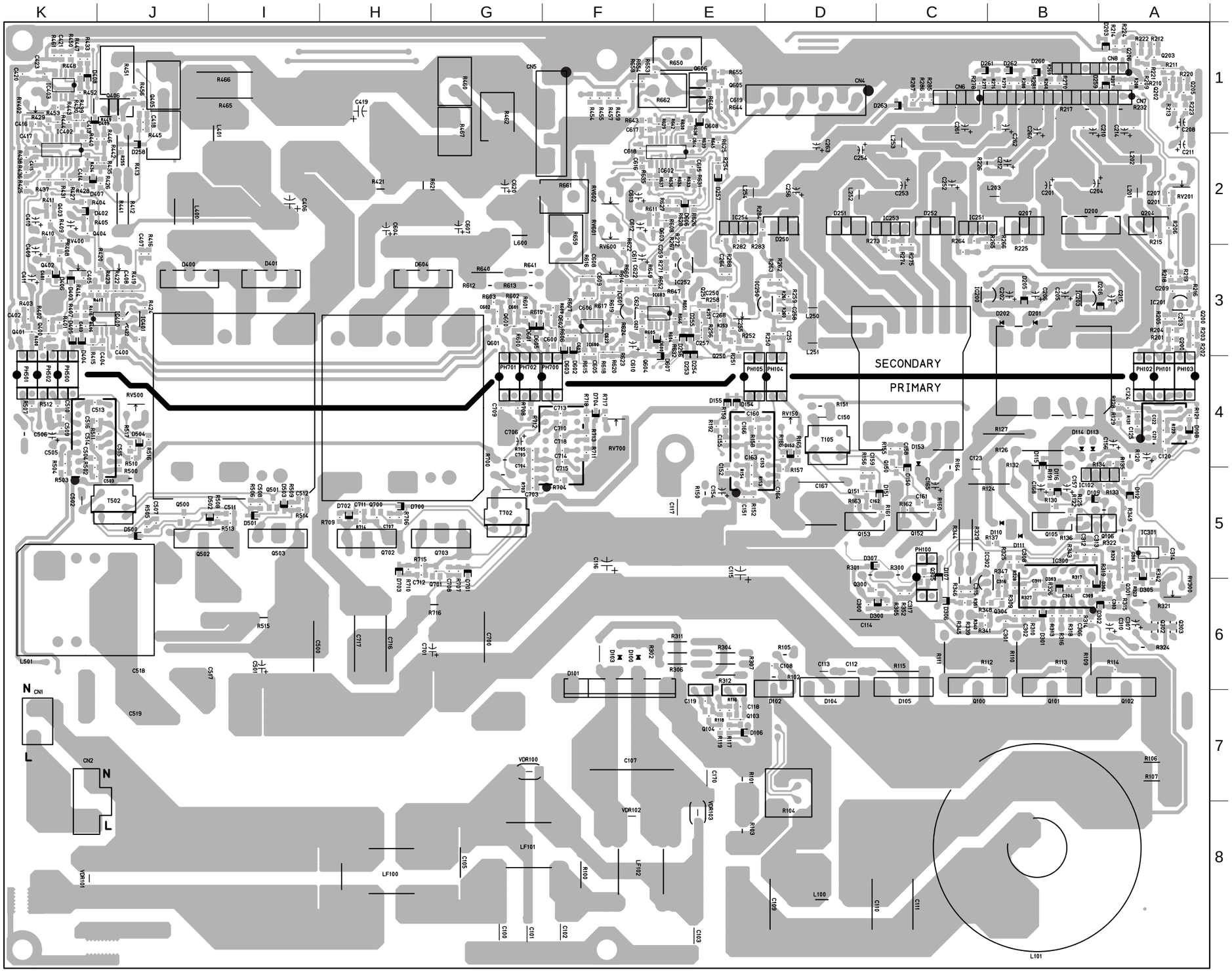
M BOARD (APS-132)

* : B SIDE

D100	F-6	IC203	B-3	RV150	D-4
D101	F-6	IC250	D-3	RV201	A-2
D102	D-6	IC251	C-2	RV250	E-3
D103	F-6	IC252	E-3	RV300	A-6
D104	D-6	IC253	C-2	RV400	K-3
D105	C-6	IC254	E-2	RV401	J-3
D106	*E-7	IC300	B-6	RV402	K-1
D107	*C-5	IC301	*A-5	RV500	J-4
D108	*A-4	IC302	B-6	RV600	F-3
D109	*B-5	IC400	*J-3	RV601	F-2
D110	B-5	IC401	J-3	RV602	F-2
D111	B-5	IC402	*K-2	RV700	F-4
D112	*A-5	IC403	*K-1		
D113	B-4	IC500	K-4	THP100	E-6
D114	B-4	IC600	*F-3	THP101	E-6
D115	*B-4	IC601	F-3		
D116	*B-5	IC602	*E-2		
D150	*C-5	IC603	*E-3		
D151	*C-5	IC700	F-4		
D152	*D-4				
D153	C-4	Q100	C-6		
D154	*E-4	Q101	B-6		
D155	*E-4	Q102	A-6		
D200	B-2	Q103	*E-7		
D201	B-3	Q104	*E-7		
D202	B-3	Q105	B-5		
D203	*A-1	Q106	A-5		
D205	*B-3	Q150	*C-5		
D206	*B-3	Q151	*D-5		
D250	D-2	Q152	C-5		
D251	D-2	Q153	D-5		
D252	C-2	Q200	*A-3		
D253	*E-3	Q201	*A-2		
D254	*E-3	Q202	*A-1		
D255	*E-3	Q203	*A-1		
D256	*E-3	Q204	A-2		
D257	*E-2	Q205	*A-1		
D258	*J-2	Q206	*A-1		
D259	*B-1	Q207	B-2		
D260	*B-1	Q250	*E-3		
D261	*C-1	Q251	*E-3		
D262	*B-1	Q300	*D-6		
D263	*C-1	Q301	*A-6		
D300	*C-6	Q302	A-6		
D301	*B-6	Q303	A-6		
D302	*A-6	Q304	*B-6		
D303	*B-6	Q305	*C-5		
D304	*A-6	Q400	*K-3		
D305	*A-6	Q401	*K-3		
D306	*C-6	Q402	*K-3		
D307	*D-5	Q403	*K-2		
D400	J-3	Q404	*K-2		
D401	I-3	Q405	*J-1		
D402	*K-2	Q406	J-1		
D403	*K-3	Q500	*J-5		
D404	*K-3	Q501	*I-5		
D405	*K-3	Q502	J-5		
D406	*K-3	Q503	I-5		
D407	*K-2	Q600	*G-3		
D408	*K-1	Q601	*G-3		
D409	*K-1	Q602	*F-3		
D500	*J-5	Q603	*E-2		
D501	*I-5	Q604	*F-4		
D502	*I-5	Q605	*E-1		
D503	*I-5	Q606	*E-1		
D504	*J-4	Q700	*H-5		
D600	*E-3	Q701	*G-6		
D601	*G-3	Q702	H-5		
D602	*F-3	Q703	G-5		
D603	*F-3				
D604	H-3				
D605	*G-3				
D606	*E-2				
D607	*E-3				
D608	*E-1				
D700	*H-5				
D701	*G-5				
D702	*H-5				
D703	*H-5				
D704	*F-4				
IC101	A-4				
IC102	A-5				
IC150	E-4				
IC200	C-3				
IC201	A-3				

APS-132 M -A SIDE-

SUFFIX: -12



APS-132 M -B SIDE-
SUFFIX: -12